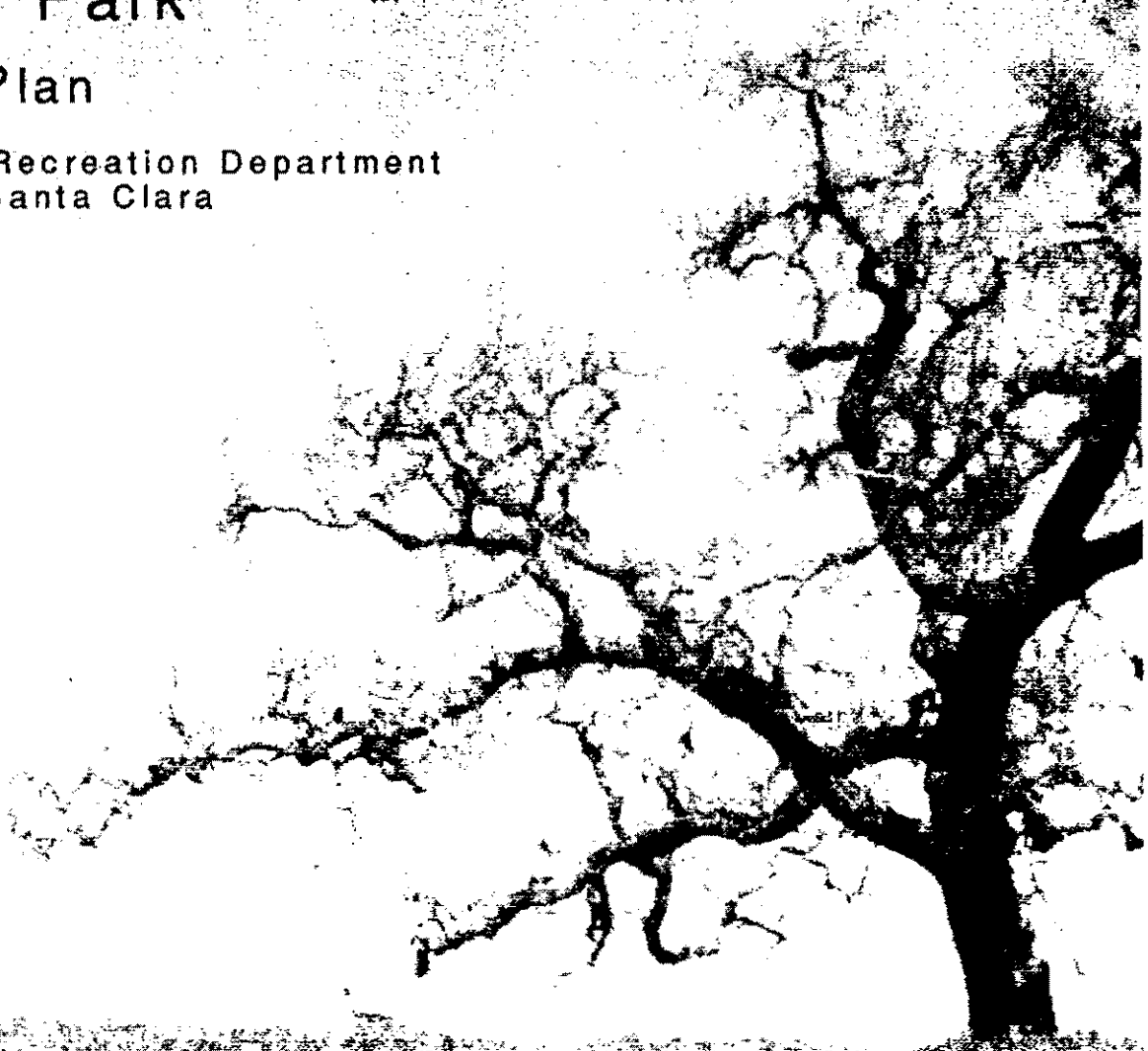
Joseph D. Grant County Park

Master Plan

Parks and Recreation Department
County of Santa Clara

July 1993



JOSEPH D. GRANT COUNTY PARK

MASTER PLAN

Prepared for the
Parks and Recreation Department
Public Service Agency
County of Santa Clara

Prepared by
Amphion Environmental, Inc.
&
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July 1993

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Executive Summary

The Preliminary Master Plan -- documenting project goals, physical elements, program development, management strategies, and implementation priorities -- was prepared to help guide the preservation and enhancement of Joseph D. Grant County Park over the next 20 years. The following report represents the culmination of a coordinated effort by consultants, County Parks and Recreation Department Staff, Task Force members and the general public. The Master Plan builds upon the baseline information established in the Program Report (prepared by Hardesty Associates, September 1990). During the Master Plan development a wide variety of recreational alternatives were explored. Some of these alternative features were evaluated as unsuitable for inclusion in the park (identified in *Section 2.2 Alternatives Study*). The master planning effort was done in conjunction with the initial environmental review. Several issues are identified throughout the plan that may be refined in the future as a result of on-going environmental investigations.

Section III - Physical Master Plan Element identifies the proposed location of new and/or improved recreation opportunities at the park. The proposed plan is envisioned as a phased program implemented over the long term, dependent on available funds and other resources. The Master Plan balances preservation and management of the park's natural and cultural resources, with recreational uses. The following elements are discussed in detail in the Master Plan:

- **Park Access:** The plan recognizes the impacts of the State owned access roads on the future preservation and development of the park. It accepts the limited ability to change the condition of these roads and that any improvements will need to be coordinated with CalTrans. Access enhancements proposed include scenic roadside turnouts, improved signage, parking restrictions and pedestrian crosswalks. A single entry point, the existing kiosk, the proposed staging areas, and recreation activities focused in the valley floor all reinforce the identity of the park.
- **Vehicular Circulation, Staging Areas & Parking:** The plan proposes modifications to vehicular circulation and staging areas/ parking lots to provide better back-country access to trails, to improve access to activities in the main meadow, and for equestrian users trailering their horses to the park.
- **Trails:** The plan acknowledges the existing network of over 40 miles of trails and adds 10.7 miles of new trails. These new trails improve the interconnections of the trail network. The trail system is divided into three types of trails for use: hiking only, hiking and equestrian, and multiple use. Special multiple use trails include the proposed Whole Access Trails and the Bay Area Ridge Trail.

- **Day Use Recreation Areas:** Day use areas include the proposed facilities to accommodate interpretive programs, picnicking and fishing.

  Interpretive Activities: A new visitor center is proposed as a long term goal to serve as both a visitor contact point and environmental interpretive center. In the short term the Buddy Residence is proposed to be used as the visitor center. The Ranch House is proposed to be utilized for cultural history exhibits. Additional interpretive sites are proposed by the Master Plan at the Grant Lake Environmental Area, the Whole Access Nature Trail along San Felipe Creek, the Green Barn and the Halley Hill Astronomy Site.

  Picnic Sites: Five non-reserved picnic sites are proposed including along the San Felipe Creek, in the Main Meadow, at the Green Corral Equestrian Area, in the Rose Garden/ South Lawn and at Grant Lake.

  Reserved group picnicking sites are proposed on the east side of the San Felipe Creek, at the East Garden of the Ranch Complex (in conjunction with the Cookhouse) and at the existing Chuck Wagon Group Area. In addition the existing Stockman's Group Area is relocated in an attempt to preserve the mature oak tree that is being detrimentally impacted.

  Fishing: Four lakes are proposed to be stocked with warm water game fish. In addition, a handicapped-accessible floating fishing pier is proposed at the southern end of Grant Lake.

- **Overnight / Extended Use Recreation Activities:** Overnight use areas include: proposed improvements to the existing campgrounds (total of 40 individual and 4 group sites), accommodating 40 additional individual sites within these campground areas as the demand warrants, the development of a pilot back-country camping program and year round equestrian camping at the Green Corral.

- **Special Programs:** The plan proposes to accommodate several special interest uses that can benefit the general park visitor. These include astronomy programs, polo and special events. The long-term presence of these activities will need to be monitored to ensure that the proposed activities continue to be compatible with the overall park goals. This review should be achieved through the special permit or lease renewal processes.

- **Facilities and Infrastructure Improvements:** The plan provides guidelines for the visual character of new park structures, future uses of historic and non-historic structures and required infrastructure improvements.

The Physical Master Plan is augmented by *Section IV - Program Development and Management* which outlines program development, management issues and techniques in the following areas:

- **Trails Development and Improvements:** The trails development guidelines propose standards for development and prioritizes improvements. These guidelines define a point-to-point system of signage and that locates major park destination points and the Grant Ranch House, as well as the next trail junction.

Field signage is proposed to strengthen the users sense of place and connect them to historic park uses.

- **Interpretive Program Development:** Development of an interpretive program identifies opportunities that could be highlighted by the proposed educational programs dealing with both the natural and cultural history of the park. The plan recognizes the necessary long term commitment of vision, physical manpower, equipment and budget needed to implement interpretive programs. It recommends forming partnerships with local tribes and special interest groups to develop interpretive materials and programs.

- **Resources Management:** Resource management addresses the three categories of recreational, natural and historic resources. The application of the management strategies to the park lands should take into account the collective characteristics, limitations and interactions of all the resources. Management strategies identify primary issues and potential methods for the following areas:

  Recreation Resources: Options for managing day use areas are explored including: education programs; periodic closing of highly impacted areas to allow for restoration of overused areas or to protect potentially hazardous areas in periods of flood or fire danger; a re-evaluating the appropriate of recreational activities and locations; and increasing maintenance and manpower for monitor. The unique considerations and issues related to special events are also discussed.

  Natural Resources: The plan identifies sensitive resources and hazardous areas where access should be restricted. It also establishes a vegetation management plan with a three prong focus of: vegetation enhancement and management of Halls Valley bottom lands; selected pilot programs of natural succession outside the valley floor; and park-wide oak regeneration and protection.

  Fire Management: The proposed fire management program is aimed at lessening the severity of potential fires. It advocates seasonal risk assessment, education and prevention programs, and explores potential fuel modification options such as animal grazing, mechanical fuel control, planting for fire safety around structures and high use areas, and prescribed fire.

  Watershed Management: The plan focuses on the primary concerns of ground water regeneration, erosion control and water quality within the watershed. Fish management of stocked ponds, and wetland protection are also addressed.

  Pest Control Management: The pest control management section focuses on control of feral pigs and ground squirrels with a combined management approach of protection of resources, removal of pests and habitat modification.

  Cultural Resources Management: The plan addresses the non-renewable archaeological resources, visible historic structures and the rural historic landscape. Resource protection, identification, evaluation and management options are discussed.

- **Security and Emergency Procedures:** Security, safety and emergency procedures were also factored into the proposed management program. These issued include those associated with trail use, fire hazards, polo and special events. The Master Plan proposes there be a resident ranger in the park, as well as phone service to the campgrounds.

In *Section V - Implementation*, development priorities are divided into three phases. Two projects, the Grant Lake dam stabilization and the water distribution pipe repair, are long term projects that have already begun. The physical improvements and management programs are phased as follows:

- **First Phase** (one to five years) focuses on protection of and improvements to existing natural, cultural and recreational resources. These include: park boundary identification, staging areas along Mt. Hamilton Road, roadways through the Main Meadow, equestrian staging area, trail recognition and realignments, whole access trail first loop, whole access natural trail, trail signage, Bay Area ridge trail, orientation board, Grant Lake environmental education program and trail, Green Barn creek, Ranch House Complex, individual picnic areas, group picnic areas, pilot fish stocking, campground improvements, back-country camping pilot program, astronomy program, polo/multi-use field, range management operations, a permanent ranger in the Bonhoff House interpretive programs, infrastructure and building improvements, revegetation, fire management, watershed management, wildlife management, and cultural resource management.

- **Second Phase** (six to ten years) expands the successful pilot programs and undertakes new development and programs. These improvements include: parking and circulation, whole access trail challenge loops, new trails, trail amenities, trail signage, new visitor center, individual picnic sites, continuation of fish stocking and back-country camping pilot programs, infrastructure and building improvements, and continuation and enhancement of management programs.

- **Third Phase** (eleven to twenty years) completes the proposed improvements, reassesses the programs and modifies the Master Plan as needed. These improvements include: turnouts on Mt. Hamilton Road, parking and circulation, picnic areas, camping, infrastructure, and continuation and enhancement of management programs.

- **Preliminary Cost Estimates:** The total cost of the proposed Preliminary Master Plan improvements are estimated at $5.1 million dollars in 1991. This estimate does not include administration, staff, management or maintenance costs, or the costs of improving the dam to meet State seismic standards. The master plan estimates that an additional 8 staff positions are needed to meet the future management and maintenance demands (double the existing staff).

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I. Introduction

1.1 Site Location & Description

Joseph D. Grant County Park (referred to throughout the text as "the Park") is located in Santa Clara County, seven miles east of San Jose on the western slope of the Diablo Range and 40 miles inland from the Pacific Ocean. The 9,522 acre park is at the base of Mt. Hamilton, below the Lick Observatory. The surrounding ridges physically and visually separate the park from the nearby urban areas. It is one of few unspoiled public rural landscapes in a region affected by the unprecedented growth and development in the "Silicon Valley." The park enjoys a Mediterranean climate typical of the San Joaquin Valley. Rainfall averages 25 inches with a high of 40.7" in 1979/1980. Temperatures range from a winter low of 17°F and summer high of 110°F. Snow occasionally falls in the valley floor with an average of one inch accumulation every two years.

The pastoral park landscape is typical of the California foothills with a wide cross section of native California ecosystems and wildlife habitats. The Park encompasses Halls Valley, and includes mountain ridges and broad slopes facing predominantly north-east or south-west. Elevation ranges from 1,220 feet along San Felipe Creek to over 2,900 feet on the Park's eastern edge. The valley was formed by earth movement along the various faults of the Calaveras Fault Zone, with remnant sag ponds and sloping terraces as visible reminders of these shaping forces. The park includes three watersheds: the ridges encompassing Halls Valley which drain into the San Felipe creek, portions of watershed that drains into Arroyo Aguague, and the eastern slope that drains into Smith Creek.

Access to the Park is by way of paved two lane roads: Mt Hamilton Road (State Highway 130) or Quimby Road. The park entrance is off Mt Hamilton Road. These roads are narrow and winding. Quimby Road, which is less than two lanes in some places, is not recommended for trailers or buses.

The Park includes some of the County's best open space resources as well as rich environmental, cultural & recreation resources. The landscape exhibits a vast diversity of plant and animal communities. Extensive artifacts exhibit traces of human occupation covering four distinct periods in California History. The archaeological resources, structures, landscape and artifacts depict the days of (1) the Ohlone

Indians, (2) use of the land as a Spanish cattle range and Mexican land grant ranch belonging to the Bernal family, (3) Anglo-American ranching days, and (4) the period when Joseph D. Grant began to gather the land parcels that make up the park today. The park provides varied, year-round outdoor recreation and environmental education opportunities. Recent information provided by the County Parks & Recreation Department estimates approximately 49,000 people visit the park annually.[1] Approximately two-thirds of these visitors use the valley floor for picnicking, camping, fishing and group uses. The other one-third is dispersed throughout the park utilizing the extensive trail system.

1.2 Background

In 1975 the Santa Clara County Department of Parks and Recreation purchased the 9,522 acres that formed a significant portion of the Grant family ranch in picturesque Halls Valley at the base of Mt Hamilton. The ranch had been bequeathed to the Save the Redwoods League and the Menninger Foundation (Kansas City) by Josephine Grant McCreery. Both organizations, in a desire to preserve the ranch intact for open space use in perpetuity, agreed to sell the property to the County. Deed restrictions were attached to the sale to ensure that future park development would not impair the natural and scenic character of the land and its environs.

One year after the acquisition of the park, a Master Plan was prepared by EDAW that reinforced the desire to "establish a balance of human use with environmental capability to meet those uses so that the qualities of each may be sustained and improved[2]." Many of the recommendations of this initial Master Plan are visible in the park today. The EDAW plan confined development of active use areas to approximately 200 acres in the valley floor. It limited vehicle penetration and utilized existing ranch road alignments to create a system of trails. Environmental control zones were established around Grant Lake, along the riparian corridor of San Felipe Creek and on the valley floor. The former ranch headquarters were developed into an equestrian center now operated by a concessionaire.

Over the years numerous other improvements have been undertaken to meet the recreation needs of the park's users. These improvements have included picnic areas, access roads, parking lots and restroom facilities in the main meadow. Picnic

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1 Earth Metrics Inc. Revenue Forecast for Joseph Grant County Park. June 15, 1990. Page 1.

2 EDAW. Joseph D. Grant County Park Master Plan, August 1976. Page 4.

and camping facilities were developed on the hillside terraces between Grant Ranch house and Snell barn. Associated utilities such as potable water, electrical power, telephones and septic systems were installed with these park improvements. The main buildings have been maintained and have seen relatively minor alteration since the Grants lived on the ranch. Improvements to the Park's equestrian concession have included a covered arena and office area. A maintenance yard to support Park operations has been centrally located and well concealed. Activities such as fishing and polo have informally occurred. A pilot program for mountain bikes on the trails in the eastern half of park has been successfully underway for the past five years.

In 1989 the County decided to update the Master Plan to guide preservation and development of the park in the next 20 years. To achieve this the County planning program was implemented.

1.3 Planning Process

The Santa Clara County Park Planning program provides a five step process to ensure full public input and consideration of issues that could impact the Park. Following is a detailed summary of the steps in the process and how they have been applied to Grant Park:

1.3.1. Program Phase: The initial Program Phase for the Joseph D. Grant County Park was begun in August 1989 and led to the completion of the Program Phase Report by Hardesty Associates in September 1990. This document provides a thorough review and documentation of the existing park (including environmental, historical, cultural and recreational resources), and establishes goals, opportunities and constraints that guide the future development of the park. The document also identifies decisions to be made during the preliminary master plan phase and measures recreation demands.

1.3.2. Preliminary Master Plan Phase: In March 1991 the Amphion team, of Amphion Environmental Inc. and 2M Associates, was retained to prepare the Preliminary Master Plan. Building upon the information and issues identified in the Program Phase, alternatives were developed, reviewed and refined. The Preliminary Master Plan is an outgrowth of these alternatives.

1.3.3. Environmental Impact Assessment Phase: To fully integrate the environmental impact assessment with the planning process, the County

contracted with the firm of EIP, Inc. Environmental Initial Studies were completed in July 1991 concurrently with the development of the alternatives and preferred plan. The Initial Studies, based on the County's Initial Study checklist, identify potential environmental impacts for each proposed alternative development plan and assisted in the preparation of the Preferred Master Plan. An Initial Study and Draft Environmental Impact Report (EIR) will be prepared upon completion of the Preliminary Master Plan and submitted for staff, Task Force and Public review.

1.3.4. **Final Master Plan Phase:** The Final Master Plan Phase will incorporate input from the EIR process and Preliminary Master Plan review into the plan. A Final Plan will be presented to the Staff, Task Force and the Parks and Recreation Commission. The plan then will be recommended to the Board of Supervisors for review.

1.3.5. **Final EIR Phase:** Upon public review of both the Preliminary Master Plan and Draft EIR, the Final EIR will be prepared simultaneously with the Final Master Plan for certification by the Board of Supervisors.

1.4 Project Team, Task Force and Public Review

Throughout the planning process a Project Team, Task Force and members of the general public offer review, feedback and direction to the Consultant. The Project Team consists of members of the County Parks and Recreation Department staff. The Task Force is made up of community members with a wide range of interests including representatives of key agencies, the Parks and Recreation Commission, local user groups and adjacent property owners. A list of those participating is given in the Acknowledgements at the beginning of the report. In addition, all Task Force meetings are open to the public and have been attended by the general community. Additional general public input sessions will be incorporated during the Environmental Assessment including the EIR scoping meeting, and public hearings. Presentations of both the Preliminary and Final Plans to the Parks and Recreation Commission and Board of Supervisors will be open for public comment.

1.5 Definition of the Goals & Objectives of the Park Master Plan:

Development of the goals and objectives for Grant Park was begun during the programming phase. During the 4 April 1991 meeting the following project Goals, Objectives, Opportunities and Constraints were presented and accepted by the Task

Force. These goals will serve as the guiding force for the implementation of the Master Plan at Grant Park.

1.5.1 Project Goals

The Preliminary Master Plan for Grant Park should accomplish the following goals:

1. Establish the identity and character of the park, while protecting and conserving its natural beauty and serenity.

2. Develop potential appropriate uses that will complement the existing vegetation and wildlife in the park.

3. Optimize the recreational use potential of the park based on citizen's' need in the valley, and establish long-term guidelines for future park development.

    a. Establish recreational development capacities for the park. Key to any recreation program will be a comprehensive trails plan.

4. Analyze existing land use at the park, and develop a balanced resource management plan which will incorporate vegetative, wildlife, range fire and recreational aspects within the park.

    a. Provide a balance between grazing requirements, specific ecological conditions and existing and proposed recreational use patterns. A key element in this program will be fire management guidelines.

5. Promote a "good neighbor policy" in all aspects of the park's improvements.

6. Evaluate the park's existing trail system and its usage and develop recommendations for future improvements, and use designations.

7. Develop a functional and coherent vehicular circulation pattern that will improve access to existing and proposed recreation areas.

8. Evaluate the functional potential of existing park structures and determine public uses which will generate potential park revenue while minimizing maintenance and operational costs.

9. Maintain and preserve the historical significance of the ranch.

    a. Maximize the natural sciences, archaeological and historical interpretative opportunities taking into account the existing historical park structures.

10. Improve existing facilities to enhance the health, safety and welfare of the public by developing efficient facility management policies and guidelines.

11. Actively solicit and incorporate public and agency participation and feedback throughout the master plan process.

1.5.2 Supporting Process Specific Goals

12. Identify Master Plan project improvements and costs to enable project improvement budgeting and construction document phases to proceed in an orderly manner upon adoption of the Final Master Plan.

13. Prepare guidelines for phasing long range development plans for the park. Key to any future development will be an infrastructure rehabilitation and expansion plan.

14. Provide solutions for maximizing revenue potentials at the park.

1.5.3 Criteria and Constraints

1. The Master Plan shall be consistent with the current County's General Plan regarding "Regional Parks, Trails and Scenic Highways," adopted by the Board of Supervisors.

    a. All trails will be reviewed by the Project Team and Task Force.

2. The Master Plan shall complement the existing pastoral character of the Park.

3. Proposed development shall harmonize with existing vegetation and wildlife.

4. Proposed improvements shall benefit public use and county revenue potential.

5. Proposed improvements shall be designed to minimize maintenance and operational costs.

6. Proposed improvements shall be designed in compliance with existing agreements, easements, memorandums of understanding pertaining to the Park.

    a. This includes the provisions under which this land was dedicated as parkland.

    b. These "restrictions" require that the land shall be used for park and park related open space purposes in perpetuity, that the uses shall not impair the natural and scenic character of the land and its environs and that no new roads, except for service and parking access, may be constructed.

7. Preliminary Master Plan process shall be integrated with the EIR program performed under a separate contract.

Section II
Master Plan Approach

Fire Management

- Discussions regarding fire management supported the overall management of the park. However, it was acknowledged that the absence of a major fire in the park's history is due to fortuitous circumstances given the fire dangers posed by chaparral and poison oak that have built up in the west side of the valley.
- There was some debate among the group as to the effectiveness of cattle for fire management. Some members felt cattle grazing was a good method for fuel management in the park, while others expressed concern over the environmental quality of grazed lands.
- The group generally supported exploring the use of prescribed burns as a management tool; however there were concerns expressed about this method in relation to the current drought, control of the fire so it does not escape and fire's effect on wildlife.

Wildlife Management:

- Discussions regarding wildlife management primarily centered on the control of feral pigs and ground squirrels. There was concern expressed regarding the effectiveness of the current live trapping management method for controlling these pests.

Cultural Resources:

- Discussions regarding cultural resource management encouraged the preservation of historic resources. There was some inherent contradiction regarding the use archaeological sites for interpretive programs. In general they agreed that specific archaeological sites should not be revealed to the public to help protect the resource; even though there was desire to use a bedrock mortar as an exhibit site.

2.3. Environmental Assessment Initial Study Summary

An Initial Study was completed that focused on the three initial alternatives for long range development. This study was presented to the Task Force at the June 12, 1991 meeting. The Environmental Initial Study identified potential environmental impacts for each of the proposed alternatives using the County's Environmental Evaluation Checklist. At this stage in the process the initial environmental evaluation of potential impacts was general in nature. The initial studies prepared for the preferred alternatives will be incorporated into the Final EIR for the Master Plan. As the Final Master Plan is developed the evaluation of environmental impacts and description of mitigation measures will become more detailed. The development of the Master Plan will continue to be integrated with the environmental review process.

- The astronomers stated that there would be technical difficulty associated with incorporating the park's 10" telescope into the visitor center, though a solar telescope was viewed as an appropriate means of educating day visitors on the science of astronomy..

Polo:

- The group felt that a formal field would require too much water to maintain. The group generally believed the level of irrigation required to maintain a formal field would draw-down of the park's groundwater They also felt a lush green field would have a negative visual impact on the park in the summer months. Several of the group members supported the idea of a green field for multi-purpose activities and polo (during years with normal rainfall).
- The proposed location in the Alfalfa field would require grading and drainage, and the group wanted to avoid extensive changes to the natural topography for the field. They did support the inclusion of a polo /multi use field near the existing field.

Snow Play:

- The group discussed integrating snow play into the Master Plan. they considered the safety of the users and the management repercussions of encouraging such activity given that the snow level is usually outside of the park boundaries.
- The group determined that snow play should be addressed as part of the management plan, but not provided for as part of any recreation programs.

General Improvements: Additional general improvements reflected the proposed optional uses and included: a "phone" at the Line Shack; realigning the entry fencing and parking areas, removal of the Snell Barn; either removal or improvements to the Line Shack for ranger use; and development water tank and restrooms to serve Deer Valley and the Line Shack. Most of the related concerns have been expressed above.

- The Task Force felt that while they could not support the recreational use of such historic structures as the Line Shack, Snell Barn, Washburn Barn or Green Barn, they wanted these structures protected for their historic and visual values.

Resource Management related issues: The group reviewed various resource management options for the park as they explored recreational use options. Many of these concepts were more fully developed as the Master Plan was refined. The management plan that resulted from these discussions can be found in *Section IV.* Following are the key points the group explored in considering resource management options.

Vegetation Management:

- Discussions regarding vegetation management focused primarily on re-vegetation to encourage return of native plant communities.

such as the boyscouts to use this area), Line Shack, Washburn Barn, and near the CFD Station at Smith Creek.

The Task Force felt the developed camping areas should remain in the existing locations. They felt that back-country camping was permissible provided it was strictly limited and did not conflict with the beauty of internal park vistas. Deer Valley was not a recommended location due to its unspoilt beauty.

Visitor Center, Interpretive Programs & Ranger Presence: Optional proposals included the use of the Casa House as a visitor center, the location of a seasonal ranger office at the Line Shack and on-site interpretive programs at Edward's Field, Green Corral and Washburn Barn.

- The concept of a new visitor center and interim use of the Ranch House was generally supported by the Task Force. Some members did voice support for the use of the Casa House, though others questioned the practicality of using the structure.
- Staff expressed concern over the manpower required to locate a seasonal ranger at the Line Shack and indicated they would prefer a patrolling ranger on the trail (possibly on horse-back).
- The group felt the Green Corral would be difficult to utilize for cattle related interpretive programs due to difficult access for cattle and potential conflicts with other activities in this area. Concerns about utilizing Edwards Field or Washburn barn were expressed above.
- The Task Force expressed some concerns regarding the potential impacts from use of the environmental zone on the west side of Grant Lake as an environmental education area. It was generally agreed that an environmental interpretive trail would be included in the Master Plan provided the EIR found this use compatible with the protected natural resources.

Special Programs: Options regarding astronomy included restricting the programs to either the Meadow, Halley Hill (with or without the telescope housing) or incorporating an astronomy program into the new Visitor Center. Other alternatives explored for polo included a formal field in the Alfalfa Field and restricting polo from the park. The potential inclusion of snow play was also reviewed.

Astronomy programs:

- Some members of the group expressed concern about removing astronomy from Halley Hill because they believe that this program was beneficial to the park users.
- There was general agreement regarding the potential benefits of an astronomy program. However, there were concerns expressed over the proximity of the formal programs to the campgrounds; the accessibility of site, circulation and parking; and the visual considerations of the telescope housing. The decision of the Master Plan to locate the astronomy program on Halley Hill and the final physical elements that should be included are contingent upon the findings of the EIR.

included in the master plan. The proposed features they reviewed and discarded included:

Trails Systems: Two alternative trail organization and communication systems were identified. These were communicated to the park user through trails maps alone, or through a combination of docents and trail guides published by the private sector. One alternative also looked at opening some of the west valley trails to multi-use. After studying the alternatives the Task Force felt that:

- Neither the current system of no defined hierarchy of trails and the proposed radial trail system would make it easier for a visitor to use the trails.
- A new trail extending from Mt Hamilton Road north into Smith Creek Gorge would not be appropriate given the environmental sensitivity of the area.
- Opening up the west side trails might create a conflict between bicyclists and beginning equestrians utilizing the stable concession (especially given the sight-lines, vegetation and topography that characterize this side of the valley). With the exception of the Ridge Trail, the group felt bicyclists should be restricted to the valley floor and east side trails.

Staging Areas and Vehicle Circulation: The alternative staging area locations explored included: Edwards Field (with the Miller's residence removed), the Washburn Barn, and Snell Barn. The Task Force felt that:

- Edwards Field might have potential use for cattle operations exhibitions, but the traffic access and negative visual impacts would need to be addressed.
- The use of the Washburn Barn as a staging area or any other recreation use would contradict the goal of being a "good neighbor" due to the barn's proximity to the private inholdings.
- There were potential conflicts with locating staging or recreation activities in the environmental sensitivity areas surrounding the Snell Barn.

Most members of the group supported the removal of the parking at "Telescope Row;" though there was some disagreement about this design concept due to the popularity of this parking strip with amateur astronomers.

Equestrian staging area: Optional equestrian staging areas that were not incorporated into the Master Plan included: the Washburn Barn and Maintenance Meadow. The Task Force felt that:

- Their concerns regarding the Washburn Barn are expressed above.
- Maintenance Meadow was too small to adequately meet the needs of the equestrians and not centrally located.

Picnic Areas: Additional picnic areas were proposed for: Edwards Field, Washburn Barn and Snell Barn. The Task Force's concerns regarding the placement of picnicking in these areas were similar to those expressed above for other activities in these locations.

Camping: Other campsite locations included: expansion south of the existing Snell campgrounds and renovation of the Woodland Youth Group Area into individual sites. Alternative back-country campsites included: Deer Valley (permitting larger groups

D. Develop water and fire management guidelines as an integral part of the design alternatives.

E. Expand the park wide environmental preservation programs necessary to sustain and preserve the natural ecosystem.

2.2. Alternatives Study

Development of the Preliminary Master Plan began with a Brainstorming Workshop on April 21, 1991 involving the Task Force, members of the park staff and public. The Brainstorming Workshop opened with a slide show that provided an introduction to the park and the range of site issues. The group then took an awareness walk of the Main Meadow to begin a common awareness of the site and facilitate discussions. The workshop continued with two small group activities. In the first activity the three groups were asked to focus on elements of their ideal Grant Park. The second activity focused the small group discussions on recreation activities, their roles in the future park, and relative time frame for implementation. The findings of the workshop were summarized and served as a basis for developing the three alternative plans.

Based on the preferences expressed during the workshop, the consultants developed three alternative plans that focused on the recreation uses of the park, and presented these plans for review in May 1991. These alternatives were refined to respond to comments by the Task Force, park staff and public, and were further discussed at the June 12, 1991 meeting. The alternatives were designed to depict a range of recreation options; exploring various activities, levels of use, and planning approaches. From these alternatives, the Task Force selected preferred elements that formed the basis of the Master Plan described in Section III. In addition to the three alternatives, discussions included review of the natural resource management plan that prioritized such issues as re-vegetation, watershed protection, fire and pest control. (*See Section IV - Programming and Management.)* The descriptions and illustrations of the alternatives and plan identifying natural resource management zones are included in the Appendix for reference.

Many of the features reviewed during the development of the Master Plan were evaluated by the Task Force as unsuitable for inclusion in the park. It is important to document these features and encapsulate the expressed concerns as they indicated as much about the intended future character of the park as those elements that were

3. **Recreation Inventory:** An extensive park use questionnaire was developed and distributed during the Fall of 1989 to determine typical user profiles, existing park use, and potential future uses. The questionnaire asked respondents to prioritize both desirable and undesirable park uses. The following activities were viewed as potential park uses and were analyzed in the Preliminary Master Plan: astronomy, equestrian use including polo, mountain biking, hiking, camping, interpretive educational activities, wildlife observation, fishing, snow play, group use - picnics, and group use - special events. Opportunities and constraints were identified, as well as specific issues relating to each recreation use. Inappropriate uses included: hang gliding, motorized sports, food concession, swimming, hot air ballooning, airport, restaurant, bed and breakfast and petting zoo.

4. **Park Facilities and Utilities:** The report also reviewed vehicular access to the park, circulation and parking within the park, emergency access requirements and the trails system. The infrastructure within the park was documented including the potable water , electricity, propane, telephone and septic systems. Existing structures were reviewed including the Ranch House Complex and other residences in the Halls Valley, the maintenance yard, the equestrian complex, barns in the valley and other miscellaneous structures (including windmills and stock tanks). Fences and dams were also recorded. Guidelines were developed for building and infrastructure improvements.

5. **Park Management:** Both equipment and manpower were inventoried and maintenance requirements of the existing park assessed. Security concerns, existing procedures and requirements are also documented.

6. **Guidelines for Alternative Phase:** In summary, the Program Report established five guidelines as the focus for the Preliminary Master Plan[1]:

   A. Assess new park development, such as expanded camping and group picnicking, in relationship to capital investments and long term returns and environmental impacts.

   B. Integrate recreation activities, such as mountain biking and polo, into the existing park. Stress conservation of resources.

   C. Utilize the environmental zones as the structure for recreation use expansions, contractions or reassigned uses.

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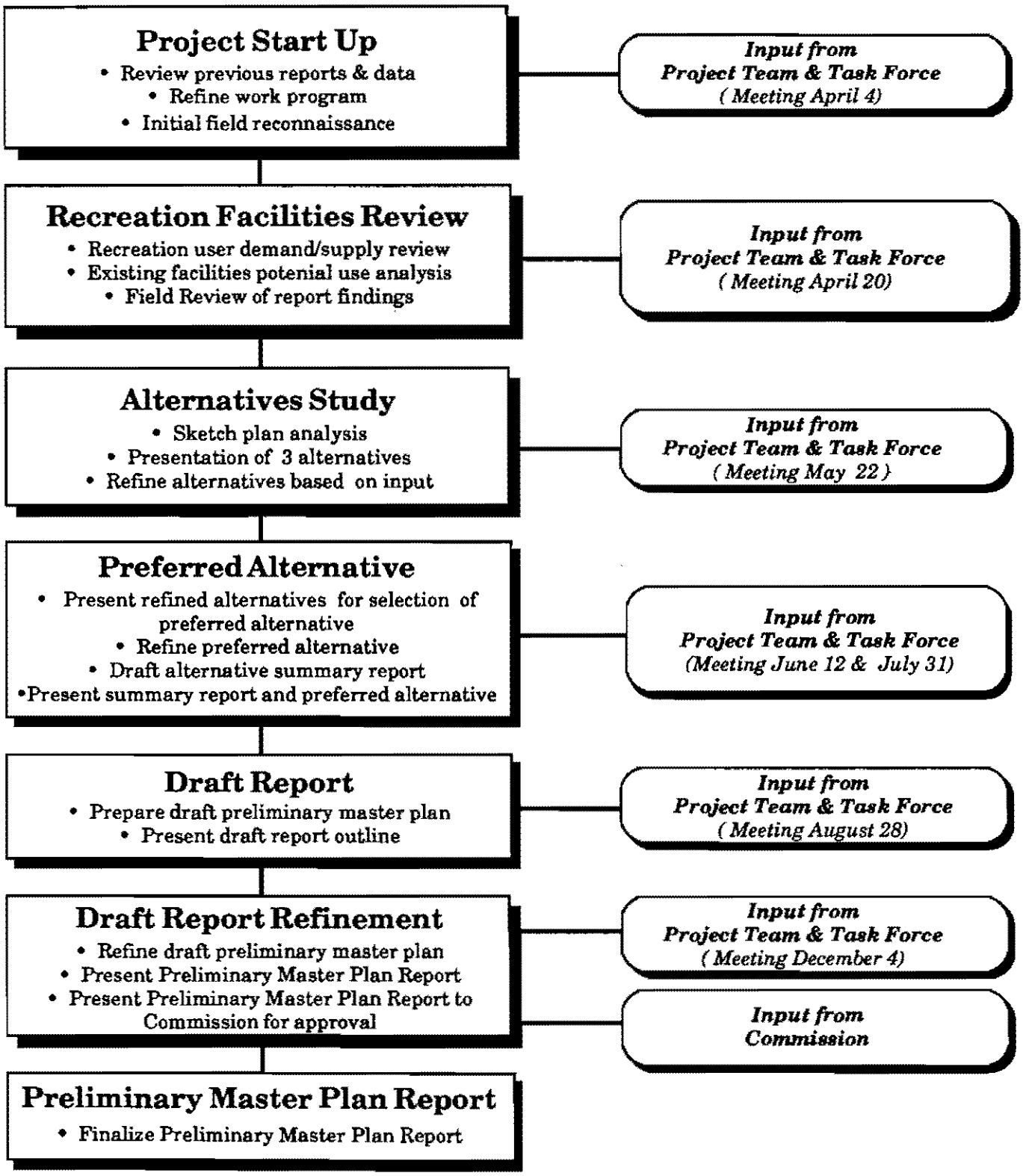
[1]Hardesty Associates. Programming Phase, September 1990. Page 124



Work Plan

Master Plan Process

II. Master Plan Approach

The process used for the preparation of the Preliminary Master Plan is summarized in the Work Plan chart below. In brief, after reaffirming the findings of the Program document, three alternatives were developed and presented to the County Staff, Task Force and general public for review and comments. These three alternatives were then refined and presented for further review. From these alternatives a preferred plan was developed and is included in this Preliminary Master Plan Report. *(See Section III Physical Master Plan Elements.)*

2.1 Program Report Summary and Recreation Facilities Review:

The Program Report for Joseph D. Grant Park was prepared by Hardesty Associates and completed in September 1990. The report established the baseline resource inventories, and documented land uses, recreation opportunities and constraints, park facilities and management. The report served as the beginning point for master plan development.

A summary of the Program Report was presented to the Task Force at their 4 April meeting with the key issues identified as follows:

1. **Resources Inventory, Opportunities and Constraints:**

   Natural Resources: A natural resource inventory studied the flora and fauna of the park, its geology and soils, water/hydrology, acoustics, viewshed and galaxy views within the park. Associated resource management issues were identified such as re-vegetation, wildlife management, watershed management and fire management. These opportunities and constraints served as some of the primary areas of focus during the development of the Preliminary Master Plan.

   Cultural Resources: The cultural resources were identified relating to the four periods of human occupation. Both the archaeological and historic resources were examined, with the need identified for cultural resource interpretive programs.

2. **Land Use Inventory:** The private lands, easements and park leases were identified within the park.

Section III - Physical Master Plan Elements

III. Physical Master Plan Elements

3.1 Summary of Preferred Master Plan:

The preferred master plan was developed from the three Refined Alternatives based on the comments from the Task Force, Project Team and general public. The initial preferred master plan was presented at the Task Force meeting on July 31, 1991 at Grant Park. This plan was further refined to develop the physical master plan elements described below. The plan reflects a long term outlook of 20 years and considers future recreation demands upon the park. Several elements address the short term phasing needs; recognizing fiscal and staffing considerations *(see Section V)*. The following is a narrative description of the major design elements of the preferred plan.

3.2 Park Access:

Access to the park is via Mt. Hamilton Road (State Highway 130) and Quimby Road. These are narrow, winding, paved two lane roads. The State owns/maintains Mt. Hamilton Road and the County maintains Quimby Road. Neither agency have any major realignment improvements currently planned for either road. The winding nature of the roads makes it challenging for horse trailers, campers and buses to reach the Park. Quimby Road, though shorter in overall length, has a greater number of tight curves and steep grades making it the more difficult of the two access roads. Access limitations will continue to affect the Park in the foreseeable future and must be considered during program development. It needs to be acknowledged that the character of these roads contributes to the expectation of the "pastoral" nature of the park and plays a role in its preservation. The County Parks Department should continue to work with CalTrans and the County Transportation Agency to encourage future improvements to park access such as a pullout on Mt. Hamilton Road near Clayton Road, and signage and realignment to improved sight-lines at the intersection of Quimby Road at Mt. Hamilton Road. Additional County actions to improve traffic in the area should include encouraging visitors to use Mt. Hamilton Road instead of Quimby Road, and to encourage ridesharing for any event over 100 people.

Both Mt. Hamilton & Quimby Roads are designated as Scenic Highways within Santa Clara County General Plan. This designation recognizes the aesthetic quality of the scenery of the area and carries with it a 100 foot scenic corridor setback. Policies connected with this designation include: land-use and building controls that protect

the natural scenery from activities that would diminish its beauty; the regulation of signs and prohibition of billboards; and provisions for turnouts and view sites oriented toward users of the scenic roads[1]. It is the master plan's long term goal to comply with this scenic corridor setback for both new and existing features within the Park boundaries. All new development should respect the 100 foot setback requirements. The master plan directs the phasing-out of existing non-complying elements such as non-historic structures and pens. Affected areas would include the Grant Lake parking area, and the pens/ corrals at Miller residence and Grant Ranch Stables.

In keeping with the Scenic Highway designation, automobile turnouts are proposed along Mt. Hamilton and Quimby Roads to provide scenic overlooks, orientation and interpretation sites. These tumouts would improve upon the existing pull-out locations. The specific design and final location of these turnouts would need to be coordinated with CalTrans to meet their safety standards and should be minimally developed for one to two cars to be unobtrusive from other locations within the Park. They should be signed to prevent long-term parking; encouraging visitors to use identified staging areas within the park. Amenities should be limited to interpretive/orientation signage. The provision of trash cans is not encouraged unless litter becomes a management problem.

To reinforce the presence of the Park, entry signs should be located on Mt. Hamilton and Quimby Roads at all three entry/exit locations to welcome the visitor to Grant Park and to clearly identify the park boundaries. A non-obtrusive county standard identification sign should be utilized at these boundary locations. Sight-lines and safety must be the over-riding consideration in the site specific placement of the signs. Smaller-scaled versions of these signs should be used where regional trails connect with the Park's trails system.

To further emphasize the Park image and enhance the safety of pedestrian crossings along Mt. Hamilton Road, posted 25 mile per hour speed limits, parking restrictions and pedestrian crossing should be located in the Valley floor. Parking along Mt. Hamilton Road's shoulders is restricted from the northern Park boundary to the historic road near McCreery Lake. Coordination with CalTrans would be necessary to enforce this restriction since Mt. Hamilton Road is under their jurisdiction. Four crosswalks are designated where trails meet Mt. Hamilton Road. The crossings should be signed for

[1] From: Santa Clara County General Plan. Scenic Highways. pages H7-10. March 1982

Scenic Easements

North
PARK ACCESS
Joseph D. Grant County Park
Entry Point Signs
No Parking Zones
Crosswalks (4)
View Overlook Road Turnouts

Park Access

pedestrian right-of-way and marked with striping on the pavement. Fences along either side of the road (in the Alfalfa Field and along Grant Lake) would restrict trail users to these designated road crossings.

3.3 Vehicular Circulation, Staging Areas & Parking:

Vehicular use within the park can be divided into three general categories based on the number of visitors and their length of stay. These are day use, extended use and special events. Each of these uses have different needs and present different development and management considerations.

3.3.1 Day Use: Day use visitors can be further divided into three categories: back-country users, Main Meadow users and equestrian users

Back Country Users: Many of the park visitors are repeat visitors who's primarily recreation activity is use of the trail system. These park users often desire to access the trails directly without obtaining orientation information or mixing with the activities in the Main Meadow. To meet these needs three staging sites for hikers and bicyclists are located off Mount Hamilton Road. Equestrian users should be directed to the Main Meadow due to the maneuvering requirements of horse trailers. Back-country, overnight campers should not be permitted to use these staging areas, but rather should be encouraged to park in the Oak Grove Staging Area for security reasons.

Each staging area would include a gated parking lot that has been graded with an all-weather surface, and an "iron-ranger" for the collection of park fees. These staging areas should be monitored and the gates that control access off Mt. Hamilton Road locked each night.

Grant Lake Staging Area: This staging area serves Grant Lake, McCreery Lake, and as a trail-head for Yerba Buena Trail, Los Huecos Trail, Halls Valley Trail, Bernal Trail, and Windmill Trail. The existing parking lot would be relocated outside of Mt. Hamilton Road's 100 foot scenic setback and re-configured to provide for 20 cars, including handicap access to the picnicking and fishing pier. Trash cans should be provided. Native plant materials should be used to screen the parking area from view, but should not interfere with sight-lines required for safety.

Twin Gates: This staging area serves as a trail-head for Pala Seca Trail, Canada de Pala Trail, Bonhoff Trail and Yerba Buena Trail. A parking lot should be

Back Country Staging Areas

developed for 20 cars on the north-east side of Mt. Hamilton Road in North Field. The existing gate and fence line should be re-configured to keep the parking area outside of the 100 foot scenic highway setback. No parking should be permitted along Mt. Hamilton Road for 500 feet each side of the staging area. No amenities such as trash cans, toilets or potable water facilities would be provided in this area.

Smith Creek Staging Area: This staging area would serve as a trail-head for Foothill Pine Trail, Eagle Lake Trail, Pig Lake Trail and Smith Creek Trail. A parking lot for 20 cars should be located to the south of the Smith Creek Fire Station. The existing gate should be relocated adjacent to Mt. Hamilton Road so it is evident to the user when the staging area is closed. The actual parking area would be outside of the 100 foot scenic highway setback and at least 150 feet away from the bank of Smith Creek. The final location of the gate and staging area would be coordinated with the California Department of Forestry and Fire Protection (CDF) and adjacent property owner's, including CalTrans. No parking should be permitted along Mt. Hamilton road for 500 feet on either side of the access to the staging area. No amenities such as trash cans, toilets or potable water facilities would be provided.

Edwards Field Staging Area: This staging area would serve as a trail-head for Edwards Field Trail. A parking lot for 5 to 6 cars should be located to the on the west side of Mt. Hamilton Road across from the existing Washburn Barn Gate. The proposed gate should be located adjacent to Mt. Hamilton Road so it is evident to the user when the staging area is closed and provide adequate sight lines for drivers. The actual parking area would be outside of the 100 foot scenic highway setback. No parking should be permitted along Mt. Hamilton road for 500 feet on either side of the access to the staging area. No amenities such as trash cans, toilets or potable water facilities would be provided.

Main Meadow Users: The park visitor with a destination in the Main Meadow would use the existing park entry drive off Mt. Hamilton Road. At the entry gates is a the existing entry kiosk. In addition an orientation board is proposed for when the kiosk is not staffed. Connecting this drive is the two-way paved access road that serves the Grant Park Equestrian Center and Bonhoff House (ranger residence), and the paved two-way access road that serves the Maintenance Yard. At the Main Meadow, a one-way (15 feet wide), loop road to the left is

Main Meadow Circulation & Parking

proposed to provide access to all the major destinations on the valley floor east of the Main Meadow. The existing roadway across the center of the meadow, and the two parking areas / access roads called "Telescope Row" and by the Green Barn should be removed to re-establish the pastoral nature of the valley. The existing asphalt curbs would be either removed or backfilled to reduce their visual impact. Access to the Green Corral, Stockmans Group Area and Campgrounds would be provided by a two-way paved road on the western edge of the Main Meadow. This road follows a portion of historic alignment of the Mt. Hamilton Road and would connect with the existing camping access road and access to the Green Corral and Stockman's Group Area.

On the valley floor parking lots would be associated with dispersed recreation destinations. On the south-east side of the proposed Visitor Center would be a paved parking lot for ten visitor cars and two Park staff. This lot would be designated as short-term parking. The Oak Grove parking lot located to the north of the Ranch House would be the main staging area for activities at the Ranch House Complex. It would be a paved lot for 60 cars, including handicap parking spaces. Ranger and maintenance parking for ten vehicles is located to the north of the Buddy House. Three paved parking areas would located off of the loop road and serve the picnic areas in the Oak Woodland on the east side of the San Felipe Creek accommodating a total of 100 cars. The final location of the proposed road and parking lots would be adjusted to avoid impacting environmentally sensitive or seasonally wet areas between the stream and ranch house complex. Native plant materials would be used to screen all of the proposed parking areas from view. The existing Meadow parking area located on the west side of the main meadow accommodates 20 cars. The existing paved Stockman's Group Area parking lot is retained and accommodates 90 cars. The existing paved parking lot at the Grant Stable/Chuckwagon Group Area accommodates 30 cars and horse-trailers. A new paved parking lot for 20 cars would be located near the campground amphitheater to accommodate campground and amphitheater visitors. A small lot for five cars would provide handicap parking at the base of Halley Hill for astronomy programs

Equestrian Users (horse-trailers): Equestrians would be directed to stage at the Green Corral located in the Main Meadow. This area should include a graded, all-weather, decomposed granite parking area for ten horse trailers located to the south of the access road. The historic loading pens & corral should

Equestrian Users

★ Staging Areas
Overflow Staging Areas
Large Group Staging Area
Grant County Park Equestrian Center *(Grant Stables)*

EQUESTRIAN USERS

Joseph D. Grant County Park

be rehabilitated for use by equestrians. Composting bins signed to inform users of proper disposal of manure should be added to this area. Amenities would include a picnic area for 40 - 60 people with picnic tables, barbecue, trash cans and tie racks located adjacent to the corral. Year-round equestrian camping would be permitted at the staging area. The Green Corral area users would share the existing restroom with the adjacent Stockman's Group area. The long term goal is to relocate this restroom to the location shown on the plan that should better serve these two user groups, as well as removing the facility from the center of the picturesque view down the valley.

Access to the Grant Park Equestrian Center would be provided by a two-way paved access road that connects to the entry drive west of the park entry kiosk. For safety reasons, the existing access road to the stables directly from Mt. Hamilton Road should be closed and utilized only for emergency access. The proximity of the access road with the intersection of Mt. Hamilton and Quimby Roads, and poor sight-lines make this a hazardous access point. In addition, the presence of a separate entrance weakens the image of the equestrian center as an integral part of the park.

3.3.2 Extended use: The pilot back-country camping sites would introduce the need for staging areas for extended use of the Park trail system. The requirements for vehicle storage, security and use monitoring dictate that the staging area should be located near other ranger activities. The Oak Grove parking lot would be the logical central location for staging of extended trips. Specific parking spaces could be designated in this area. From this location visitors could obtain their permit, complete other check-in procedures at the ranger office and be centrally located to access both the east and west sides of the valley.

3.3.3 Special Events - Grant Park is a popular location for many special events during the year. These events attract large numbers of visitors to the park and require a planned parking scheme with controlled access/egress to minimize the disruption of normal park activities. Currently special events fill the Main Meadow and these parked cars greatly change the character of the valley. The parking for these events is proposed to be relocated to Alfalfa Field north of the Oak Grove parking lot. Access would be provided by the loop road. The County Parks Department should require special event sponsors to encourage ridesharing for

any event over 100 people. The County should develop a ridesharing brochure that would be available to special events coordinators.

Equestrian events would continue to utilize the area near the Green Corral as an overflow for staging of horse trailers for small to medium sized events. Larger events (over 100 people) would stage in the Alfalfa Field.

3.4 Trails

The following Trail Plan and Trail Characteristics chart overview the ultimate trail system for the park. The trail system proposes to build upon the existing network of ranch roads and trails established over the years within the park. Approximately 51.4 miles of trails (82.5 kilometers) are provided of which 10.7 miles of new trails or currently unrecognized trails would be added to the existing system. These new trails would improve the interconnection of trails, provide for greater loop opportunities, and facilitate use of all types. Improvements should be made to the alignments and grades of many of the existing trails.

The trails system within the park is generally divided into east valley and west valley and into three classes of trails for use by hikers, equestrians and/or bicyclists. All trails would be included on a new trails map. Trail markers should orient the user to both a destination on the trail and the Ranch House Complex. *(See Section 4.2 for further discussion of destinations and trail signage.)*

3.4.1 Hiking Only Trails

Hiking only trails would access the more sensitive resource areas of the park. These include: the Grant Lake Environmental Protection Area; along the Smith Creek riparian zone; the Halls Creek drainage (Windmill Trail); and by Bass Lake. Also indicated for hiking only should be interpretive/educational trails that would be located at Grant Lake and along San Felipe Creek near the Visitor Center.

In the past, dogs have been restricted from the all areas of the park. In compliance with a motion approved by the Board of Supervisors (1991), the Edward's Field Trail now permits dogs on leashes.

Cross-country hiking is permitted throughout the park except in the Grant Lake Environmental Protection Area. There are numerous unmarked trails that have been created by cattle or deer. The impracticality of total eradication of these confusing trails dictates that the system of recognized foot trails should be clearly identified and marked in the field.

Trail Plan

See Main Meadow Plan
Campground
Snell Barn
North
Scale
0' 1000' 2000' 3000'
Park Boundary
Lake / Pond
7
Trail Name Key - see text for explanation
Trails
- Whole Access Trail
- Hiking, Equestrian, Biking
- Hiking and Equestrian
- Hiking Only
- Bay Area Ridge Trail
Staging Areas
Hike-In / Ride-In Camp (reservation basis)
Stables
TRAIL PLAN
Joseph D. Grant County Park

Main Meadow Trail Plan

Map Key	Trail	Trail Conditions		Trail Users			Design Considerations
		Length Miles / Kilometers	Elev. Change Low/High	Hiking	Horse	Bike	
1	Hotel	3.5 / 5.6	1520/2070	x	x	x	- portions developed to whole access standards
2	Lower Hotel	1.0 / 1.6	1400/1500	x	x	x	- portions developed to whole access standards
3	Lower San Felipe	1.3 / 2.1	1480/1530	x	x	x	- portions developed to whole access standards
4	San Felipe	2.0 / 3.2	1350/1650	x	x		
5	Stables	0.8 / 1.3	1530/1960	x	x		
6	Grant Lake Loop	1.0 / 1.6	1600/1620	x			- developed to whole access standards - single track width - trail standards to reflect environmental zone conditions
7	Halls Valley	2.5 / 4.0	1600/2480	x	x	x	- recommended one way up for all users
8	McCreery Lake	0.7 / 1.1	1530/1700	x	x	x	- single track trail width only
9	Yerba Buena	2.5 / 4.0	1700/2590	x	x	x	
10	Barn	0.1/ 0.2	1470/1540	x	x	x	- portions developed to whole access trail standards
11	Corral	0.4 / 0.6	1380/1480	x	x	x	- portions developed to whole access trail standards
12	Canada De Pala	7.5 / 12.1	1580/2720	x	x	x	- portions developed to whole access standards
13	Bonhoff	0.9 / 1.4	2350/2450	x	x	x	
14	Foothill	1.4 / 2.3	2150/2390	x	x	x	
15	Smith Creek	1.5 / 2.4	2150/2800	x			
16	Manzanita	2.3 / 3.7	2270/2600	x	x	x	
17	Brush	1.4 / 2.3	1720/1840	x	x		
18	Dutch Flat	4.1 / 6.6	1680/2457	x	x	x	- Ridge Trail: portions to be used by bicycles (upon connection outside of Park)
19	Wild Turkey	0.7 / 1.1	1520/1720	x	x	x	- portions developed to whole access standards
20	Dairy	2.1 / 3.4	2150/1600	x	x		- Ridge Trail: portions to be used by bicycles (upon connection outside of Park)
21	Edwards Loop	2.2 / 3.5	1755/2190	x	x	x	- dogs permitted on leash - Ridge Trail: portions to be used by bicycles (upon connection outside of Park)
22	Washburn	1.7/ 2.7	1755/2965	x	x	x	- extremely steep terrain; recommended one way down for hikers
23	Bernal	1.2/ 1.9	1600/1680	x	x	x	
24	Tamyen	1.8 / 2.9	2465/2900	x	x		- extremely steep terrain; recommended one way down for hikers
25	Windmill	1.5 / 2.4	1650/2465	x			
26	Antler Point	0.2 / 0.3	2885/2999	x	x	x	
27	Pala Seca	2.1 / 3.4	2600/2880	x	x	x	
28	Los Huecos	1.2 / 1.9	1640/2840	x	x	x	- one way up for bicycles
29	Smith Creek Overlook	0.3 / 0.5	2680-2840	x	x	x	
30	Bass Lake	0.8 / 1.3	1580-1800	x			
31	Pala Seca Camp	0.2/ 0.3	2480-2560	x	x	x	
32	Brush Camp	0.7/ 1.1	1760-2120	x	x	x	- Ridge Trail: to be used by bicycles (upon connection outside of Park)

Trail Characteristics

3.4.2 Hiking and Equestrian Trails

These trails are primarily located in the west valley. New hiking and equestrian trails include the McCreery Lake Trail, and the Edwards Trail Connector.

3.4.3 Multiple-use Trails

Multiple-use trails permit use by hikers, equestrians and bicyclists. In the summer of 1987 a pilot program began in the park for Santa Clara County mountain bike use. Due to extensive work by mountain bikers and equestrians to educate trail users about cooperative trail use, the program has proven to be successful. Volunteer units patrol the trails to make sure users are aware of the policies and that the multiple-use trails continue to be a success. Multiple-use trails are generally restricted to the east side of the valley. Proposed multiple-use trails include the Bernal Trail, Lower Hotel Trail, Lower San Felipe Creek Trail, Antler Point Trail, Smith Creek Overlook, and Manzanita Trail.

There are two special types of multiple-use trails proposed within the Grant Park system: the Whole Access Trail, and the Bay Area Ridge Trail.

Whole Access Trails: Santa Clara County promotes the recreation concept of whole access, in accordance with the State of California Title 24 guidelines and the recently adopted Federal Americans with Disabilities Act. Three whole access trails will be designed to encourage use by those in wheelchairs, the very young and the elderly, as well as the general population. One of the trails will also accommodate multi-use by pedestrians, bicyclists and equestrians. These trails are will link all core area facilities, provide a sense of organization, and degree of safety from the automobile. The interpretive opportunities provided by these trails are discussed in Section 3.5.2 and 4.3.

> The first whole access trail developed should be a short nature trail, approximately three-quarter of a mile long, along San Felipe Creek near the Ranch House Complex. Due to the environmental sensitivity of this area, bicyclists, equestrains and other non-compatible uses of the trail will be restricted. This graded paved trail would maintain a gradient between 2% to 4%, and provide fully accessible stream crossings using bridges or culverts. During the implementation of the master plan potential environmental impacts would be minimized based on site specific considerations to determine the final alignment and design of the trail, surface material

(boardwalks in wetland areas, decomposed granite, soil stabilizers, asphalt, etc.), location of rest stops, fencing and stream crossing techniques. The trail would maintain the 150 foot development setback from the centerline of San Felipe Creek except where boardwalks or bridges cross the stream.

The second trail should consist of a series of three multi-use loops around the ranch's bottom lands (Valley, Stockyard, Barn, Middle Snell, and Lower Snell Fields). This unpaved, graded trail system should include a variety of lengths and two levels of challenge trails for people with disabilities as well as other hikers, equestrians and bicyclists. The shortest loop, approximately two miles from the Grant Ranch house, could conform to ideal grade requirements for whole access and be surfaced with reinforced decomposed granite. This loop would be located in the valley floor and would take the visitor from the Oak Grove staging area along the eastern side of the valley on the Lower Hotel Trail, across the Barn Trail to Snell Barn and back along the Lower San Felipe trail on the western side of the valley to the Main Meadow and staging area. Two longer loops of 3.2 miles and 4.5 miles from the Grant Ranch house would provide different levels of difficulty (due to short stretches with steeper gradients up to 8.33%). These would incorporate the Corral Trail, Wild Turkey Trail, a portion of the Canada De Pala Trail and extension of the Lower Hotel Trail. (See map page III-13.)

The third whole access trail would consist of the loop trail from the Grant Ranch house to Grant Lake and through the Environmental Protection Area. Long term goals include the development of an pedestrain only interpretive trail in the Grant Lake zone. Due to the environmental sensitivity of this area, only pedestrian use will be permitted. To minimize potential impacts the trail would be well marked, incorporate boardwalks and utilize fencing, high vegetation and channels as barriers where required. The final pathway alignments would allow retreats for birds and wildlife, with any interpretive stops sited well back from the wetland area.

Bay Area Ridge Trail: This regional trail would provide linkage to other state, county and city parks. It is the desire of the Bay Area Ridge Trail Council to locate the Bay Area Ridge Trail on the principal ridge line closest to the bay. A goal is to circumscribe the entire San Francisco Bay. The Ridge Trail system is designated as a multiple-use trail corridor accessible to hikers, equestrians and bicyclists. Grant Park offers the

Bay Area Ridge Trail Corridor

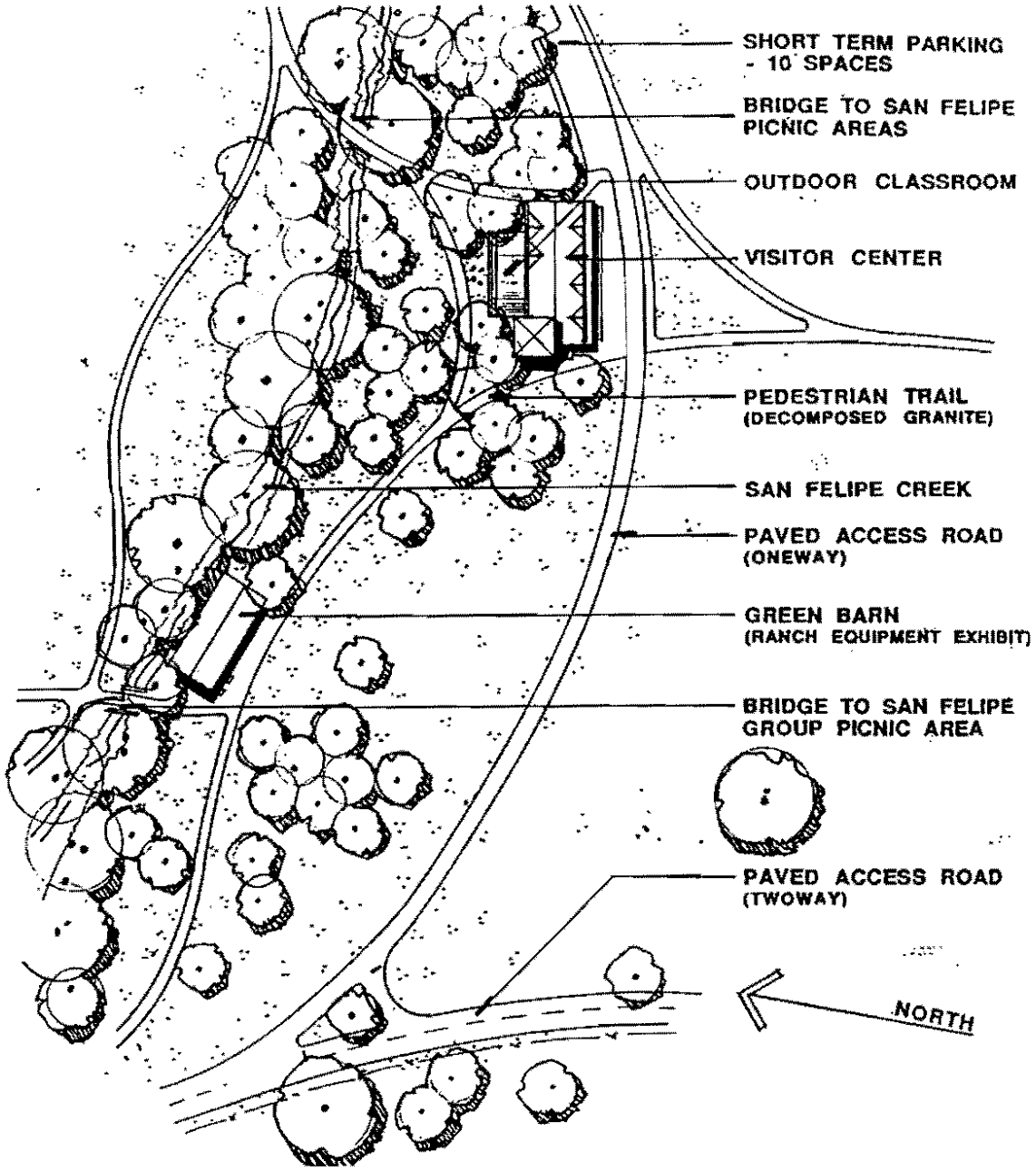
opportunity to dedicate approximately five miles of the Bay Area Ridge Trail by utilizing portions of the existing Canada de Pala Trail and the Dutch Flat Trail. Trail users would utilize the Lower San Felipe and Wild Turkey Trails to access the Bay Area Ridge Trail until future connections can be made. These trails would provide a loop from the valley floor staging areas and connect to the Brush Field back-countrycamping site. Future off-site connections to the rest of the Ridge Trail system need to remain flexible to accommodate any trail alignments that can be negotiated with adjacent private land owners. However, these may include the Edwards Field Trail and the Dairy Trail (a new portion of trail that uses an existing PG&E service road). The County Parks Department would continue to work closely with the local land owners and other agencies in reviewing future development proposals to ensure potential connections to the Bay Area Ridge Trail corridor are made.

3.5 Day-use Recreation Activities:

While there is primarily emphasis on trails activities in the park, other passive activities are proposed including interpretive programs, picnicking, and fishing. The master plan establishes two visitor contact points at the Entry Kiosk and Visitor Center where the Park user can find out about recreation opportunities.

3.5.1 Orientation: The existing entry kiosk is the initial visitor contact point. During weekends, and daily during peak summer use, the kiosk is manned. At all other times an information board is proposed to orients the park users to facilities and directs them to the Visitor Center for further information. This information board would be located on the north-west side of the entry kiosk near the existing two parking spaces. The board would include an orientation map of the park; listing of park rules and regulation; seasonal warnings such as Lyme ticks and fire conditions; monthly calendar of programs and events in the Park (and throughout the County); and special announcements. The design of the information board should be functionally and visually incorporated with the existing entry area. Its use by visitors should not conflict with the existing functions such as entry, fee collection, or use of the RV dump station.

3.5.2 Interpretive Activities: A new Visitor Center is located on the north east edge of the Main Meadow. The Center, set in a grove of additional native riparian trees, would be visible and identifiable as an information source from the loop road, without dominating the meadow. The Visitor Center should be designed for joint use as a Visitor Center and Environmental Interpretive Center. A Ranger contact point



New Visitor Center Location

within the Center would provide information about the park. The Visitor Center would also house the Park's natural history exhibits.

The New Visitor Center is recognized as a long term goal. In the short term the Buddy Residence and Ranch House meet the two functions of visitor orientation and environmental interpretation. The existing ranger office in the Ranch House is too small to continue to meet the space demands of the existing staff. Once the BuddyResidence is upgraded to meet code requirements and made accessible to the public, the rangers would relocate to their permanent office.*(See Section 3.9.2 for further description.)* The room in the western portion of the house would serve as an interim visitor contact point, and for back-country camping/ other group-use check-in. This office can be isolated from the other administration offices, kitchen, staff meeting and storage spaces. The Ranch House would continue to develop the existing exhibits, and house the Park's natural history collection until the new Visitor Center is built.

Three additional environmental interpretive sites are identified in the master plan: the Whole Access Nature Trail, the Grant Lake Environmental Area, and Halley Hill Astronomy Site. Throughout the park, features near proposed trails that area indicative of the geology, hydrology, fauna and flora and periods of human occupancy of the site should be recognized as the primary resources for the development of interpretive programs. The Whole Access Nature Trail should focus on the theme of riparian flora and fauna of Grant Park, and on riparian restoration and preservation. The interpretive sites in the Grant Lake Environmental Area should be viewed as a long term goal dependent upon the natural resources of the area. Halley Hill has been identified as a desirable location for formal astronomy programs provided any associated impacts can be mitigated. *(see Special Programs for further discussion of the astronomy programs) and Section 4.3 for Interpretive Program Development*

In the final realization of the master plan, the Ranch House would serve as an interpretive center focused on the social and cultural history of the site. The house and its exhibits chronicle the Valley's human habitation including prehistoric use by the Ohlone Indians, the Spanish land grants and Bernal Family, the Anglo-American settlers, and the Grant family. Opportunities should be explored to form partnerships with tribal members and special interest groups to develop the interpretive exhibits for the house. Restoration of portions of the downstairs of the house have already begun and the Park possesses several items to exhibit. Additional work would be required to

Interpretive Sites

bring the structure to code and to accommodate handicap access *(See Section 3.9.2).* The second floor of the house is not open to the public but serves as space for volunteer staff, docent training and exhibit preparation.

The park is fortunate to have three barns and many other structures that are remnants of the site's cultural history. These features offer opportunities to provide interpretive sites for the visitor to "discover" during their use of the Park. The Green Barn currently houses some of the Park's historic equipment. The creek bank adjacent to the barn should be stabilized. The barn should be maintained to house equipment displays that would be visible without the visitor's physical access to the barn. Other features of the park that should be reviewed for liability, stabilized and preserved include the Snell Barn, Washburn Barn, circle corral, existing fences and small structures/ *(See Section IV. Historic Resources Management for further information).* In addition to the historic structures, Grant Park has on-going ranching activities as part of the park landscape. The two existing concessions of cattle grazing and the Grant Stable could provide for many visitors unique opportunities to be close to working livestock that is part of California's history. Informal exhibitions currently occur on site as part of the normal cattle ranching and stable operations The provisions for coordination with more formal interpretive programs should be developed and incorporated into future concessionaire leases or licenses. Field names, historic fence names and gates are retained and their history related to the public.

3.5.3 Picnic Sites: Two types of picnic sites are available in Grant Park sites: non-reserved sites and reserved group sites

Non-reserved picnic sites: Five locations within the park are designated by the Master Plan as non-reserved sites: San Felipe Creek, The Meadow, Green Corral Equestrian Area, The Rose Garden/ South Lawn, and Grant Lake. These sites would be available on a first-come-first serve basis.

San Felipe Creek area: A total of 25 individual picnic sites would be located on both the east and west sides of the San Felipe Creek in the general area of the existing picnic sites. Each individual picnic site contains a picnic table and barbecue. Trash cans should be centrally located to facilitate use and maintenance. A new restroom with potable water is proposed on the east side of the Creek. The existing restrooms across the stream near the Green Barn would provide facilities until the new restroom is developed.

Picnic Areas

The Meadow area: Ten individual picnic sites are located in the area formerly known as the San Felipe group area. Each individual picnic site contains a picnic table and barbecue. Trash cans should be centrally located to facilitate use and maintenance. A new restroom is proposed should the demand for these picnic sites increase. In the interim the two existing restrooms across the meadow near the Green Barn or Stockman's Group Area serve the Meadow picnic area.

The Green Corral Equestrian area: A picnic area is proposed adjacent to the Green Corral for use by equestrians. This area would include four to six picnic tables to accommodate 40-60 people, individual barbecues and trash cans.

The Rose Garden/ South Lawn: Located to the west and south of the Ranch House the rose garden and south lawn are designated for informal picnics. Four picnic tables and trash cans are provided, but no barbecues are permitted.

Grant Lake: A small group area with five picnic sites accommodating 25-30 people is proposed near the existing picnic site on the knoll at the south-east shore of Grant Lake. Five additional individual sites would be on the east shore. Each picnic site should contain a picnic table and barbecue. Trash cans should be centrally located to facilitate use and maintenance. A new permanent chemical restroom should be located near the group picnic site (contingent upon environmental review).

Reserved group picnic sites: There are four locations within the park designated as reserved group picnic sites: San Felipe Creek Group Area, Stockman's Group Area, East Garden of the Ranch Complex and the Chuckwagon Group Area near the Grant Stables. These sites are reserved through the County's central reservation office.

San Felipe Group Area: A group area for 100 to 200 people would be located near the former site of the Green Stable (designated for removal). This area would include 10 to 20 picnic tables, a group barbecue and trash cans. A new restroom with potable water is proposed on the east side of the Creek to be shared by picnickers at the individual picnic sites and at the San Felipe Group area. The existing restrooms near the Green Barn would remain until the additional restroom is developed.

Stockman's Group Area: In an attempt to preserve the mature oak in the center of the Main Meadow, the existing group picnic area would be relocated south of the existing parking lot. This group area continues to accommodate 300 to 400 people. A relocated restroom with potable water is proposed north of the existing parking area to provide restroom facilities for the Stockman's Group Area and Green Corral Equestrian Area. The existing restroom is located in the center of the view down the main meadow and is a visual intrusion on the pastoral nature of the park; however, it would be utilized in the short term.

Because the Green Corral Equestrian Area is relatively close to the Stockman's Group Area, equestrian group events over 60 people should be required to reserve the Stockman's group area in order to reduce conflicts that could arise from both sites being used by separate groups.

East Garden of the Ranch Complex & CookHouse: A picnic area for 100 to 200 people would be located in the garden on the east side of the CookHouse in the Ranch House Complex. This area includes 10 to 20 picnic tables, a group barbecue and trash cans. Reservation of the East Garden also should include use of the CookHouse. There should be a direct connection to the East Garden by new French doors in the sunroom of the CookHouse. The CookHouse includes minimal kitchen facilities for food preparation, and provides accessible restroom facilities. Compulsory reservation of both the East Garden and CookHouse would be necessary to prevent conflicts between user groups.

Chuckwagon Group Area: A picnic area for 250 people is located at the south of the Grant Stables near the Bonhoff house This area includes 25 picnic tables, a group barbecue and trash cans. The existing restrooms located adjacent to the riding ring continue to serve this group area. Reservations for this group area should be available through the central reservation office instead of through the equestrian center concessionaire.

3.5.4 Fishing: Fishing is a popular tradition at the lakes and ponds in Grant Park. Four lakes in the Park are of a size to warrant stocking with game fish: Grant Lake, McCreery Lake, Bass Lake and Eagle Lake. A fishing license is required, but there is no closed season on the stocked fish. Bag limits should be established seasonally.

Grant Lake: Fishing at Grant Lake is restricted to the eastern shore to protect the environmental zone on the western shore. Fishing would be permitted from the

FISHING
Joseph D. Grant County Park
Stocked Lakes
• Grant Lake
• McCreary Lake
• Bass Lake
• Eagle Lake
North
Eagle Lake
Bass Lake
McCreary Lake
Grant Lake

Fishing

dam on the southern shore when the water level permits A handicap accessible floating fishing pier is located at the southern end of Grant Lake. The pier and access trail are designed to adjust to fluctuating lake levels.

McCreery Lake, Bass Lake & Eagle Lake: Fishing is permitted around the entire perimeter of these three smaller lakes. Cattle currently use both Bass Lake & Eagle Lake for water. Alternative watering tanks should be established and the cattle fenced out of ponds stocked for recreational fishing to maintain water quality and control erosion.

3.6. Overnight/extended Recreation Activities

Overnight activities at Grant Park could include back-country camping, and campsites in the valley floor for RVs, tents and groups, in addition to the year-round equestrian camping at the Green Corral (see III-11). It is recommended that camping be permitted year-round subject to user demand, weather conditions and operations requirements. The existing campsites should be reorganized around a central gathering area at the south end of the valley west of Halley ridge. The existing amphitheater should be relocated to this valley where it would be grouped with a multi-purpose play field and visitor/ amphitheater parking lot for 20 cars. The campground check-in point should be re-located here. Three one-way loop roads would feed off this central valley to serve the Hall's Valley campground, Snell campground and Woodland campground

3.6.1 Halley Hill Campground: Improvements to the campground on the north side of Halley Hill overlooking the Hall's Valley would modify the existing 20 drive-in site for RVs (up to 35 feet in length) and to provide five drive-in tent sites The existing paved road would be realigned, the curbs removed and the direction of travel reversed to accommodate easier vehicle maneuvering and centralized check-in near the amphitheater. Existing tent pads would be re-contoured for better use of the sites, (some sites would need to be relocated), and fire pits, barbecues and food storage bins would be upgraded Additional trees should be planted for shade and screening from adjacent sites. The existing restroom/shower facility remains. As demand justifies, 15 additional RV campsites would be developed within this campground along the loop road at the western foot of the slope.

Camping

Halley Hill Campground
Snell Campground
Woodland Campground
Woodland Youth Area
Amphitheater & Multipurpose Play Area

CAMPING

Joseph D. Grant County Park

3.6.2 Snell Campground: Improvements to the campground on the south side of Halley Hill would modify the existing 20 car-tent sites. This campground is less developed in appearance. The one way loop road is graded and surfaced with decomposed granite. There are no RV campsites in this campground. Campsites should include upgraded tent pad sites, fire pits, barbecues and food storage bins. Some sites should be re-configured by clustering several campsites so they can be used by small groups or families. Additional trees should be planted for shade and screening of adjacent sites. The existing restroom/shower facility remains. As demand justifies, ten additional campsites could be developed within this campground.

3.6.3 Woodland Campground: The existing Woodland Group Area is retained as a reserved area for organized groups. Four sites accommodating approximately 25 campers each would be renovated to include stone fire pits at each site. The central wetland area would be fenced for protection and used as an interpretive site. Other improvements include a centrally located restroom/shower facility, and a drop-off area with five parking spaces for youth group leaders. Access to this area would be revised with a graded dirt trail / loop road to connects the group area to the amphitheater. As demand justifies, an additional 15 individual campsites would be located in the Woodland Area off the new loop road. Trees would be planted in this area to accommodate future campsites.

3.6.4 Back-country sites: Two permit-controlled, designated back-country camp areas are designated in the Master Plan for located in the park: Brush Field Camp and Pala Seca Camp. Campers would use the Oak Grove Staging area for parking, and obtain permits reserved in advance at the ranger office in the Buddy Residence. Both of the back-country sites would be accessible by hikers, bikers and equestrian users. Each of the camp areas would have designated tent sites. No potable water, trash cans, picnic table or fire rings would be provided. Chemical restrooms and solar phones for emergency use would be located at each camp. Reservations would be handled through the Park's central reservation system.

The Brush Field camp would be located on the west side of the Park off the Brush Trail at the south-west edge of the open meadow by the water tank. This area would have two campsites with two tent pads that accommodate two or three people per tent for a maximum dispersed group size of 12 people. These sites

Back Country Camping

are the closest campsites to the Bay Area Ridge Trail. A system of reserving one of the two sites for Ridge Trail users could be instigated should it be justified by the demand.

The Pala Seca Camp would be located on the east side of the Park off the Tamyen and Canada de Pala Trails near the sag pond at the southern edge of Pala Seca Field. Four campsites would be developed in the two adjoining side valleys. Each of these side valleys would have two campsites with two tent pads, accommodating two to three people per tent for a maximum of 24 campers in the Pala Seca Camp.

3.7 Special Programs, Lease uses & Easements

The Park has several special programs, lease uses and easements that have been incorporated into park activities over the years. the expansion of these programs was encouraged by the Task Force where compatible with the Master Plan goals. the special programs and lease uses can benefit the park visitor by providing unique recreation opportunities at the park. Programs are proposed to be docent lead or concessionaire operated, but all program development should be coordinated with park staff to ensure that they are fully integrated with park activities. All special interest operations and lease uses must be self supporting. Future special permit or lease renewal should be dependent upon each program's economic viability and continued compatibility with overall park goals.

3.7.1 Astronomy Programs: Grant Park and Halls Valley share the same galaxy views as the University of California operated Lick Observatory located seven miles to the east. Because of the park's rural location and geographic separation from the light pollution of the San Francisco Bay area, viewing conditions are extraordinary. The excellent viewing conditions have led to a tradition of amateur viewing in the park. The Halls Valley Astronomical Group and the San Jose Astronomy Association have expressed an interest in continuing their informal use of the park for astronomy activities. They are also interested in enhancing the existing astronomy interpretive programs.

Portions of an interpretive site have been developed informally on Halley Hill. Eagle Scouts have donated time and labor to cut an access trail and build a ring of benches on the knoll of the hill that can accommodate approximately 60 people (approximately 500 square feet). Astronomy interpretive programs for Park visitors have been conducted by the astronomy groups' volunteers. Both astronomy groups have

expressed an interest in having the Park accept the donation of a small observatory dome. This facility would permanently house telescopes, including the Park's 10" telescope that is currently stored at the Ranch House. The design of the telescope housing would need to blend with the surrounding hillside either through the use of compatible building materials or by planting native trees and shrubs to screen any structure from the view. Electricity and water would need to be provided to the site to operate the telescopes. The existing access trail would need improvement with a decomposed granite surface, graded and widened to permit handicap access. Currently flashlights are used by the visitors to light this trail. However, low voltage trail lights have also been proposed. A dirt access road would be developed on the south side of Halley Hill from the Snell Campground to provide access for construction and equipment transportation.

The Master Plan recognizes the unique astronomical opportunity presented at Grant Park, the activities sponsored by the Society, and its members' desire to volunteer for interpretive programs. The recommended astronomy programs are divided into two categories: informal amateur viewing and formal interpretive programs.

Amateur viewing: Three sites are designated in the Master Plan for the amateur viewing events sponsored by the Park and the astronomy groups once a month, year round. These locations are the Visitor Center and adjacent parking lot, the Meadow Group Area and Stockman's Group Area. These three sites offer parking, paved areas to set up telescopes and different orientations relatively free of tree cover. The monthly viewings should continue to be official Park activities, scheduled with the Park rangers and announced to all visitors.

Interpretive Programs: Integration of astronomical information with the overall interpretive programs of the park is encouraged in the Master Plan. While the consensus reached during the development of the Master Plan is that the program offers a unique opportunity to the visitor, there were concerns expressed about the impact of the activities on the adjacent campgrounds, the visual impact of permanent structures and the impact on Park staffing and operations.. The EIR supports the recommendations regarding the program and structures The design, bidding or negotiation process utilized, and type of use permit or donation would need be determined by the County and interested astronomy groups.

3.7.2 Polo: In 1989 the Grant Ranch Polo Club was organized and became an affiliated Chapter of the U.S. Polo Association. In March of 1990, the County of

Special Programs, Lease Uses & Easements

Santa Clara's Parks Commission endorsed the playing of polo in the park with the stipulation that the members of the Grant Ranch Polo Club fulfill the requirements of the Grant Ranch Polo Club Site Manual prepared by County Staff. A special use permit was issued to the Club by the Parks and Recreation Department with continued use contingent upon Master Plan findings. As part of the requirements of the special use permit, the Club adheres to the Site Manual that ensures that the playing of polo is compatible with other uses of the park, and regulates the safety standards site features, play procedures, safety equipment, site inspection and maintenance.

Polo at Grant Ranch is played from late March to approximately the first week in November, depending upon weather and field conditions. Games are held nearly every Friday and Sunday during the season, in the late afternoon. In 1991, the club has 24 active players, including trainees (new players). Club members own their own horses, with most of the horses boarded at Grant Stables.

The Master Plan includes an unfenced, multi-use field available for polo and incorporates recommendations made in the Polo Liability Safety Program Evaluation prepared for the County[1]. The play field is also to be available for soccer, kite flying and other general park visitor use, except when scheduled for polo games. The field is located south of the Stockmans' Group Picnic area, and removed from the parking lot, picnic area and walkways for the safety of other park users. The field is narrower than a regulation field which is 300 yards long by 200 yards wide. The configuration of the meadow permits a field that is 300 yards long by 160 yards wide, with safety zones 10 yards wide on each side and 35 yards wide on each goal end. This location maintains a 150 foot setback from the top of creek, and a 100 foot setback from the nearest pedestrian path. A spectator viewing area is designated on the east side of the field adjacent to the existing paved trail and a 100 feet back from the edge of the field's safety zone. Warning signs are installed during play to keep spectators and other non-participants off the field and warn them of horses and flying balls. A horse tie-up area is proposed on the west side of the field removed from spectators, visitors, trails and adjacent activity areas to keep interaction between horses and non-participants to a minimum. The field would not be irrigated, but should be graded to remove holes and mounds. An agreement is to be negotiated with the Special Use Permit for the maintenance of the field by the Polo Club (including mowing and hole

[1] Mark S. Stone, CSP. Liability Safety Program Evaluation--Polo at Joseph D. Grant Park. Revised February 12, 1990.

filling). The level of play would be regulated by the Special Use Permit and would be contingent upon the condition of the grass cover on the field.

3.7.3 Special Events: Group activities are a popular recreation use of the Park. These activities are regulated by reservation with Group Use Permits and special use permits and can be divided into three types: Ranch House Complex events; Main Meadow events and Trail events. The Group Use Permits are for large group use of Park picnic areas. Permits are obtained through the central reservations office and must be arranged three weeks prior to the event. Special Use Permits are issued for all other special events and must be reserved approximately two months in advance. Permits must be presented to the ranger at the beginning of the event. The demands to utilize the Park for special events continues to increase. Management procedures need to account for the variety of uses and group requirements and are discussed further in *Section 4.4.1 - Recreation Resources.*

Ranch House Complex Events usually require a group use permit and include weddings and receptions, group picnics, seminars and day-use retreats that reserve the CookHouse and gardens surrounding the Ranch House. These events vary in size from small groups to up to 1,000 at annual picnics.

Main Meadow Events include group picnics and special activities. Group picnics sites are proposed at the Stockman's, San Felipe or Chuckwagon group picnic sites. Past special events have include such activities as Civil War re-enactments, Boy Scout groups and Dog trails, and vary in size from 50 to 2,000 people.

Trail Events include orienteering, running, biking and equestrian special use events. These activities utilize the trail system to customize a course for each event. In 1990-1991 Mountain bike events were the most frequently held type of races with seven events during the year varying in size from 100 to 600 participants. Horseman's rides and endurance events were almost as popular with six events, but the group sizes varied from 20 to 200 people. Given the success of these events, the size of the park and its natural beauty, it can be anticipated that these events will continue to grow in popularity.

3.7.4 Equestrian Concession: The Grant County Park Equestrian Center is leased to Grant Ranch Stables and has 14 to 34 rental horses available to park visitors. The center also offers boarding for a maximum of 25 non-rental horses, public

riding instruction, overnight pack-up trips and horse shows. The services provided at the Equestrian Center provide a unique recreation opportunity at the park. and should be enhanced to complement other County programs at the park.

The concessionaire currently leases approximately 20 acres of Park lands on a month-to-month basis. The lease lists the equestrian facilities as including two barns (36 stalls), 12 paddocks, three residences (the lease states that two of the residential buildings may be used for storage only), a covered arena, open arena and corrals. Ancillary buildings include a feed barn & tack room, blacksmith shop, wagon shed and stable office (attached to the covered arena). Several of the structures within the center were built during the mid 1800's and were part of J.D. Grant's original ranch operations, these include the Wagon Shed, Blacksmith Shop, Pala Barn and Grainery (Joaquin-Marietta Barn). Trail access is provided from the stables with a realigned trail that follows the entry drive in front of the Bonhoff House and connects with an existing trail south of the Maintenance Yard.

Proposed improvements to the stables complex include implementing the drainage system developed by the County Engineer; continued erosion control, on-going maintenance and upgrade of historic structures, and replanting trees to replace the mature elm trees that were removed due to Dutch Elm beetle infestations. A long term manure disposal program would be implemented to ensure that horses and their manure are kept out of streams, dry creek beds and drainage areas to streams. Manure would be collected in a suitable site, composted and spread over suitable upland areas to be integrated into the topsoil as a soil amendment. A detailed future study should evaluate the historic structures that are included in the lease agreement and utilized by the concessionaire. This review should include an evaluation of their historic value and integrity, structural and seismic condition, safety and code related issues and maintenance requirements.

3.7.5 Range Management Operations: For the past 15 years, Santa Clara County has negotiated and renewed a grazing lease with Lee Belli and Joseph Ferrara. The County is currently reviewing its policies toward range management. A Task Force has been established to develop a policy that balances grazing with public access/ recreational use, preserves and rehabilitates natural plant and wildlife communities, minimizes fire hazards and optimizes revenues. The County Board of Supervisors adopted a range management policy on July 1992 (See *Appendix* for copy of Range Management Policy). This policy established the guidelines for grazing

operations in Grant County Park and other parks throughout the system. It established the license requirements including the terms, land management objectives, standard of rangeland utilization such as the stocking and monitoring, the repair and maintenance or improvements, rights of entry and other insurance and contractual matters.

In 1991, the entire park was grazed with the exception of the riparian protection zone, valley floor, campgrounds and Grant Lake area. In the Master Plan, these restricted areas are proposed to be expanded to include the entire length of San Felipe Creek, Arroyo Aguague and the Smith Creek water shed from the ridgeline to the west of the creek. Smaller restricted zones would be established to protect environmentally sensitive areas, including wetlands, springs and sensitive archaeological sites.

3.7.6 Residential uses of houses in park: There are several houses in the park that should continue to be occupied by residents other than park staff: the Carriage House at the Ranch House Complex, the houses at Grant Stables, and the Miller residence located off of Mt. Hamilton Road.

The Carriage House was built in the 1930's as living quarters for the Grant family house staff. In 1968 friends of Josephine Grant McCreery were invited to live in the house. After Josephine's death, they continued to manage the ranch until it was purchased by the County. Although services for the park are now formally handled by the Parks Department, this family continues to live at the park. Based upon discussions with the current residents, this house should continue to be utilized as a residence (future park residence) as its floor plan is not conducive to public use.

The three houses that are located within the vicinity of the Grant Park Equestrian Center were the original structures utilized by J.D. Grant as a residence and center for his ranch operations prior to acquisition of the lands surrounding the Ranch House Complex. These houses are included in the lease of the center and lived in by stable employees. The Ranch Manager's House was built in the mid-1800's and remodeled in the 1980's. The Bunk House was built in the 1900's, and the Ranch Hands CookHouse was build in the mid 1800s and remodeled in the 1990s.

The Miller Residence, formerly known as the Roelling residence, is located off Mt. Hamilton Road and serves as the residence for the cattle leasee's foreman.

3.7.7 Easements: There are three types of easements within the park boundaries: a private road at the northwest portion of the park, two Pacific Gas & Electric electric transmission lines and three U.S. Geological Survey seismographs.

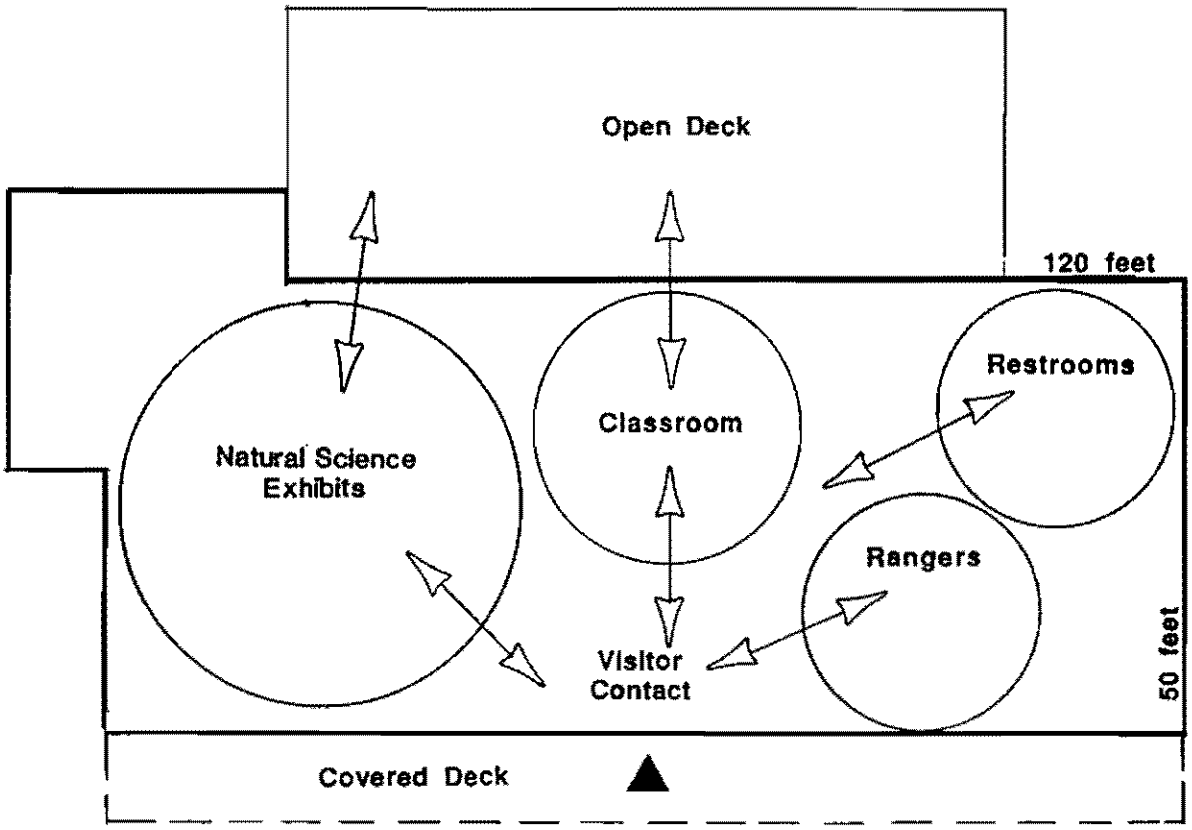
A private road provides access to the parcels located to the north of the park. It runs from Mount Hamilton Road, to the north of the Washburn Barn, across Arroyo Aguague following the existing Washburn Trail. The Park's Department has an easement for maintenance access. The easement is contained within a 60 foot wide right of way and does not permit use by park visitors. The new Bernal Trail would connect to the Washburn Trail to discourage park users from trespassing on this private road. There will be no recreational use of the private road.

The first of the two Pacific Gas & Electric (PG&E) transmission easements is a 230 KV tower line within a 75-foot wide easement and runs along the western portion of the park. The second easement is a 500 KV tower line with a 200-foot wide easement that runs across the park from the south-west corner of the property to the eastern boundary. Recreation use of these easements are generally compatible and acceptable to PG&E provided certain conditions are adhered to and/or observed. The Master Plan proposes to continue utilizing these two right-of-ways for multi-use trails. The western easement (Dairy Trail) would be proposed as a future portion of the Bay Area Ridge Trail system. Where final trail alignments are less than 50 feet from transmission structures, anti-climbing guards would be installed on the towers. There should be no structures, barbecue pits, or plant materials that exceed 20 feet in height at maturity within the easement or within 25 feet of any tower legs. All cuts and fills required for improved trail alignment would conform to General Order No. 95 of the Public Utilities Commission of the State of California. The fills would not cover the top of the tower concrete footings and all cuts around the towers would provide adequate protection to the structure. Vehicular access for PG&E maintenance crews would be maintained.

There are three U.S. Geological Survey seismographs are located near the CDF fire Station, at the Ranch House Complex and in Edwards Field to monitor local seismic activity. The USGS monitors this equipment approximately every two to three months.

3.8 Visual Character & architectural quality of new park structures

3.8.1 New Visitor Center: A new Visitor Center is planned for the Main Meadow. The structure would be a single-story, wood frame building similar to the other ranch buildings in the Park. A flexible indoor "classroom" would provide the opportunity to run interpretive programs focused on the natural history of the Park including the local geology and seismic features, hydrology, flora and fauna, and astronomy. Outdoor



New Visitor Center

"education" and gathering spaces would be provided by a covered verandah in the front and a deck in the back that opens off the exhibit and classroom space. Public restrooms would be provided and the Visitor Center would be fully accessible.

3.8.2 New Restrooms: Several new and modified restrooms are proposed as a long range goal for the Park. The design, materials and scale of the park system's current standard design slump stone facilities are such that the structures contrast with the undeveloped, open, savannah character of the Main Meadow. The existing restrooms at the Green Barn, Halley Hill Campgrounds, Snell Campgrounds and Equestrian Center should be mitigated by native plantings to reduce the visual impact of the structures by incorporating them into the surrounding vegetation patterns. As the three new facilities are constructed in the San Felipe picnic areas, the Woodland camping area, in the Woodland youth group area and at Grant Lake, it is recommended that they be located in less visually prominent and more centralized locations, and integrated with the topography and existing planting materials. Specific site investigations should be completed during the design of the facilities and associated leach fields to ensure minimizing their visual and environmental impacts.

The restroom at the Stockmans Campground should be relocated out of the center of the Main Meadow. It's current location spoils the visitors first view of the valley floor and physically impacts the mature Valley Oak. The new restroom should be located on the west side of the Stockman's Group Picnic Area parking lot, and blended into the topography and planting of the base of Halley Hill. It should reutilize the existing leach field, if possible. A site specific study should to be conducted during the implementation of the Master Plan to determine the suitability of re-use. Once the Visitor Center is built with its accessible restrooms, the restroom building adjacent to the Green Barn should be removed as it is within the riparian setback zone.

Permanent chemical restroom facilities are proposed where water is not available, such as at the back-country permit campsites. These structures should be located to minimize their physical and visual impact upon the surrounding areas. The design of the structures should be low key to blend with the surrounding areas. All temporary port-a toilets and the pit toilets around Grant Lake should be removed from the site.

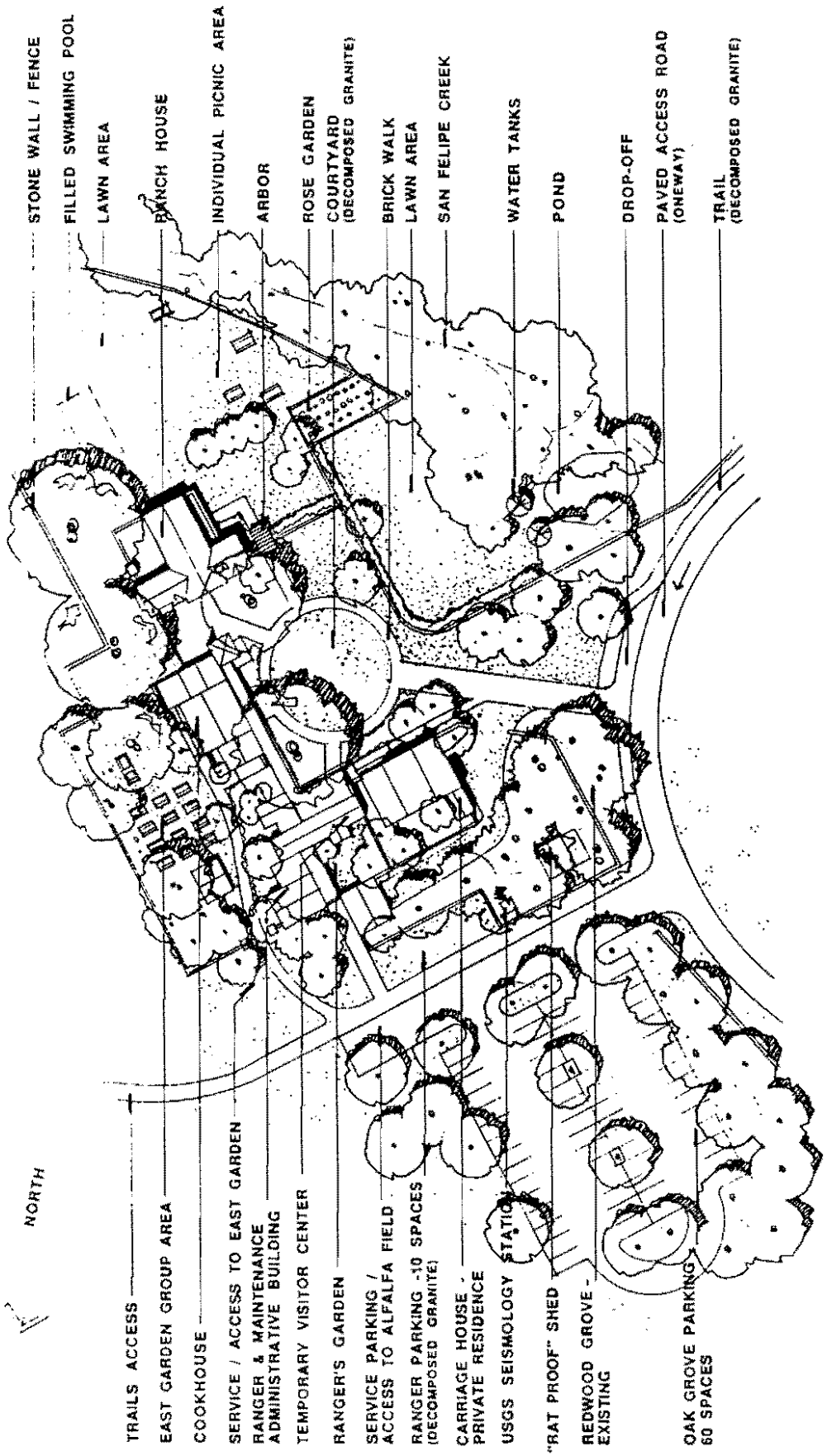
3.9 Facilities & Infrastructure Improvements: The Park's existing structures and infrastructure are generally well maintained, though much of the infrastructure needs upgrading. Regular cyclical maintenance and use of the structures should

continue. It needs to be remembered that the uses and improvements outlined in this Master Plan are seen as long term goals.

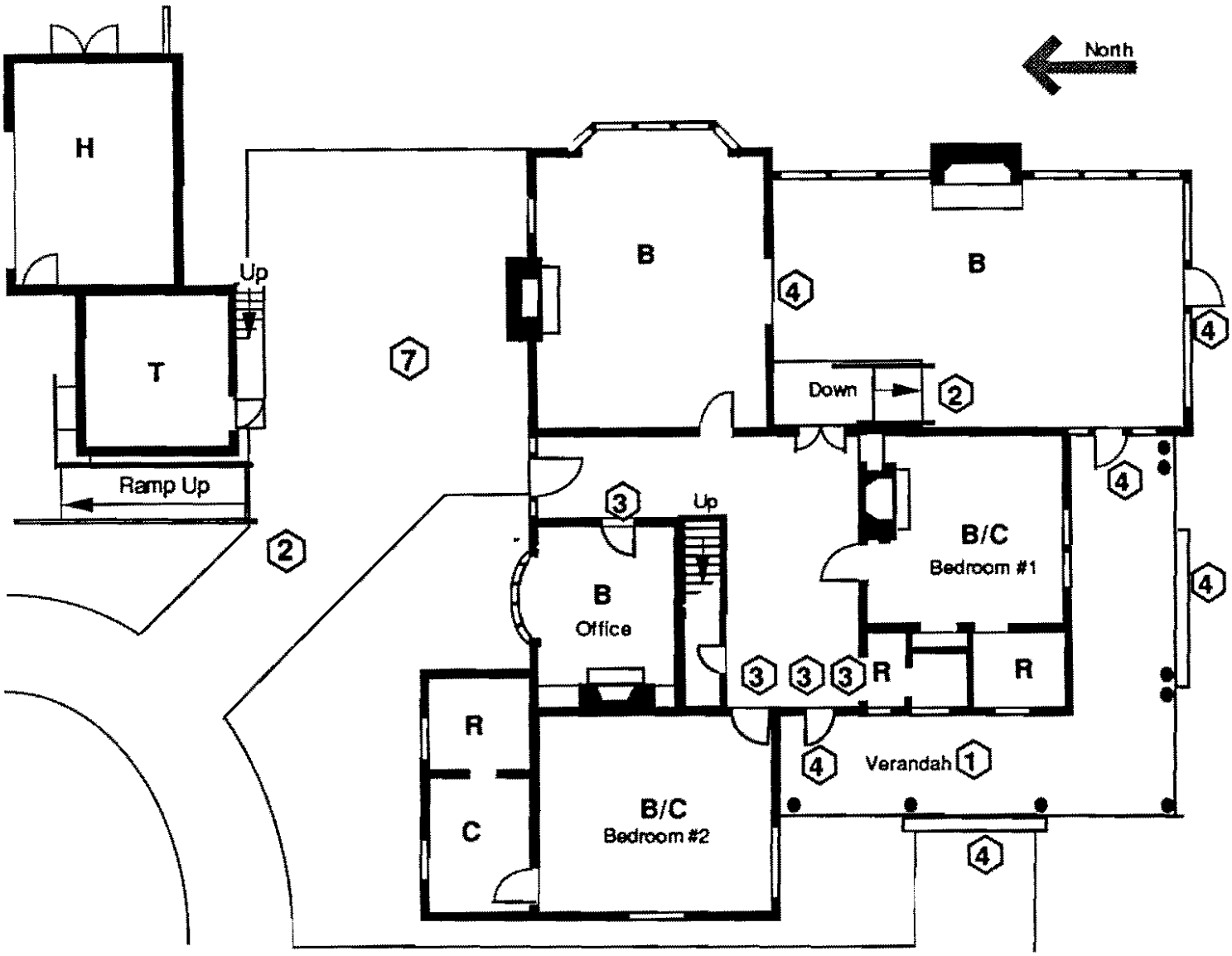
3.9.1 Historic Structures and Cultural Resources: The Park is rich in both pre-historic and historic resources that include historic structures, archaeological sites and the cultural landscape. These resources are to be protected and preserved through on-going monitoring and maintenance. Cultural/historic inventories, evaluations, and an application for official State or National Register Historic Designation (to determine their historic significance) should be completed prior to preservation work or demolition of any of the cultural resources. Resource management guidelines and standards are discussed in more detail in *Section 4.4.3 - Cultural Resource Management.*

3.9.2 Upgrade/restoration of occupied historic structures: Many of the structures in Grant Ranch could qualify as state historic structures based on their original date of construction. In general, the Master Plan proposes continued sensitive use of several of these structures as the most effective preservation tool. Occupied structures with monitored use stand a significantly better chance of survival. It is more likely that utilized structures will receive timely repairs before more expensive and intrusive actions are necessary. All work within the park needs to be sensitive to potential archaeological and ecological resources as well as the visible historic artifacts.

3.9.2.1 Ranch House Complex: The Ranch House Complex consists of five main structures grouped around a courtyard: The Ranch House, Cook House, Tank House Guest House (with attached garage) and Carriage House (with attached garage). Other structures include the "rat-proof" storage shed with an attached open shed, and one of the USGS seismograph devices. Over the long term these structures are proposed to be utilized (except for the tank house and storage shed) and several would be accessible to the public. In 1986, Spencer Associates of Palo Alto conducted a visual inspection of the buildings within the complex focusing on deficiencies, refurbishing requirements and code updates. The following recommendations expand upon this report based on subsequent visual inspections by the Amphion Team. It is recommended that the Park's Department proceed with official historic designation of these structures prior to any refurbishing so that their historic value is taken into consideration during renovations and code determinations. All structures that are accessible to the public need to be handicap accessible to comply with Title 24 regulations and the Federal Americans with Disabilities Act.



Ranch House Complex



New Work

1. Restored original verandah and columns. Remove Kitchen.
2. Ramp down to lower Exhibit's room.
3. As interpretive program requires install 32 inch wide doors for public access.
4. Grade changes greater than 1/2". Ramp for accessibility as interpretive program requires.

Interior Spaces

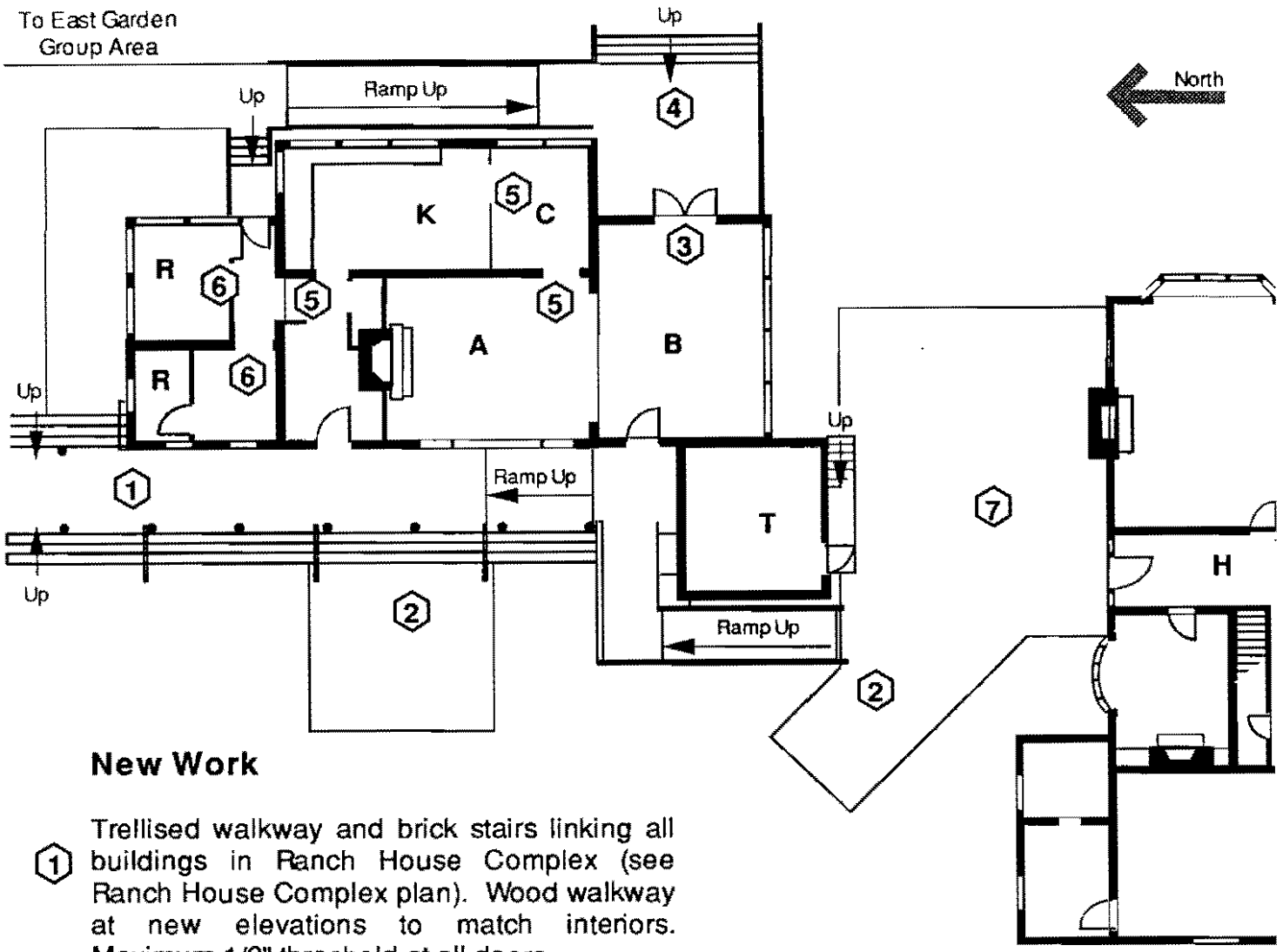
- A Entry Hall
- B Exhibit Spaces
- C Other Program Uses
- R Restrooms
- H CookHouse
- T Water Tower

Ranch House Rehabilitation

Ranch House: The ranch house was built in 1882 by the Hubbard family and remodeled in the 1930's by J.D. Grant for use as his residence. This two-story wood frame structure has cream-painted clapboards, brick chimneys, and second story dormers. Its 12-light, double-hung windows and painted shutters appear to be original to the house. A single-story open colonnade and second story porch is located on the south side of the house. Recent work on the structure has included a roof of composite shingles (c. 1984), work on the chimney, shutter repainting and refinishing work to the interior of the house.

Proposed Use and Required Code Upgrades: The proposed "Educational" or museum use of the first floor is classified as Occupancy Group B-2 by the UniformBuilding Code. This use would require no major changes inside the building except for provision of handicapped access at the main entry door. Additional interior improvements, as shown in the following diagram, are recommended to increase handicap access by the addition of ramps and doorway improvements. These improvements should be done in a way as to minimize permanent, irreversible changes to the historic fabric. The distribution of the interpretive program throughout the house needs to be balanced against the required physical improvements required to maintain accessibility. The three smaller rooms and restrooms require doorway widening to make them accessible. The need to actually access these rooms should be critically assessed as the interpretive program is developed. Public restrooms are located in the CookHouse and should not be duplicated in the Ranch House. Upgrading the light fixtures in the house should be incorporated with the interpretive program development. The second floor of Ranch House is utilized for volunteer staff, docent training and exhibit preparation and is not open to the public. Daily use of upstairs spaces as offices or storage also falls under the same classification as B-2. No residential use of the second floor should be permitted as this would require more extensive work to construct a one-hour fire separation between floors.

Cook House: The CookHouse is a contemporary of the Ranch House and was utilized as a kitchen and dining room for Grant family and guests. The building was remodeled by J. D. Grant in 1935-36. This one-story wood frame structure matches the Ranch House with clapboard siding, 12 light (panes) windows and brick chimneys. A deep verandah supported by simple wood columns runs the



New Work

1. Trellised walkway and brick stairs linking all buildings in Ranch House Complex (see Ranch House Complex plan). Wood walkway at new elevations to match interiors. Maximum 1/2" threshold at all doors.
2. New brick pathways (See Ranch House Complex plan.
3. French doors and windows.
4. Wood deck with stairs and ramp access.
5. Widen existing doors and openings to 3'-0" for disabled access.
6. Restroom doors to swing out for disabled access.
7. Rebuild stairs with 3 regular risers and handrails.

Interior Spaces

- **A** Dining room
- **B** Sun Room
- **C** Pantry
- **K** Kitchen
- **R** Restrooms
- **T** Water Tower
- **H** Ranch House

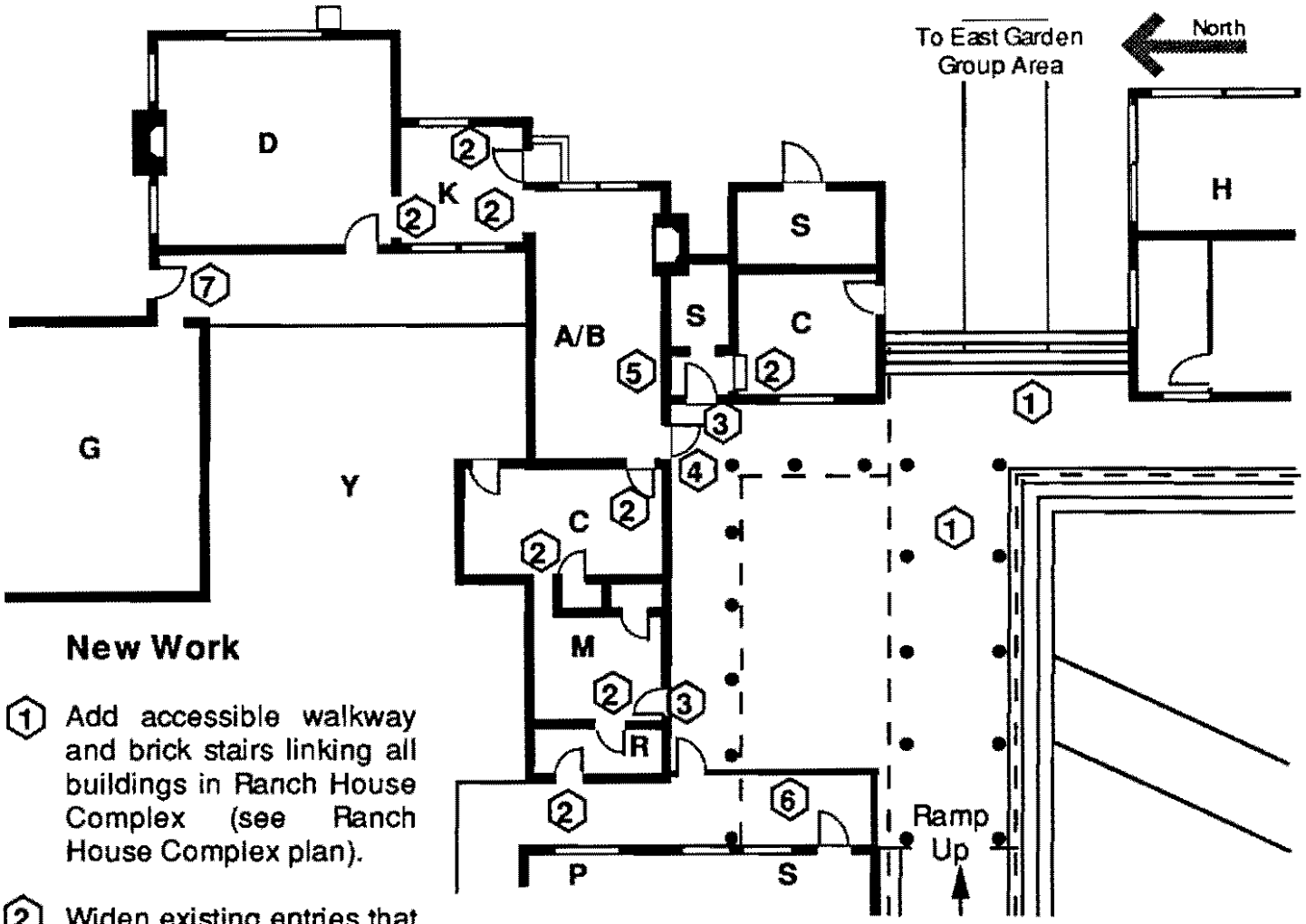
CookHouse Rehabilitation

entire length of the courtyard side of the structure. Eyebrow vents are a decorative feature of the shallow pitched roofline.

Proposed Use and Required Code Upgrades: The proposed use for group meetings and food preparation is classified as Occupancy Group B-2 Drinking and Dining. With a maximum occupant load listed as 99 people and approximately 1,480 square feet overall, the code requires two exits and handicap accessibility. The brick paving under the verandah should be covered with a wood decking to provide handicap access to the two doors that open onto the courtyard, and provide an accessible connection to the Buddy Residence. The final grades and slope of this surface need to be coordinated to provide access and to maintain the required headroom at the perimeter of the verandah roof. A ramp would wrap around the Tank House to connect this handicap accessible verandah to the entry of the Ranch House. Direct access also would be provided from the Sunroom to the East Garden Group Picnic Area by a new pair of 6'-8" high French doors. These doors should be wood and glass designed to match the existing central windows they replace. A new deck and ramp would be constructed to wrap the east side of the building and provide an accessible connection to the group area and the trail that leads to the Oak Grove parking area. The existing interior spaces of the CookHouse are on two levels. The Sunroom floor would be raised to match the adjacent Dining Room floor level permitting unimpeded circulation through the interior. The existing public restrooms, which serve the entire complex, would be upgraded and made handicap accessible with toilets and sink fixtures, grab bars, door widths, swings and approach areas that comply with the code. Upscaling the interior lighting and the kitchen appliances would improve both the present and potential uses.

Buddy Residence: This one-story, wood frame building is connected to the Carriage House by a roofed-over open breezeway. The buildings were built in the 1930's for J.D. Grant and enclose the third side of the main courtyard. The Buddy Residence has the same color scheme, brick chimneys, roof color, and raised eyebrow vent detail as the Cook House. Its verandahs, wrapping the front side, and a back elevation facing an inner courtyard verandah, also have simple wood columns at the roof edge.

Proposed Use and Required Code Upgrades: The proposed use as a ranger office and the short term use as the visitor contact point is classified as



New Work

1. Add accessible walkway and brick stairs linking all buildings in Ranch House Complex (see Ranch House Complex plan).
2. Widen existing entries that are less than 32" clear if spaces become public.
3. Existing entries with threshold greater than 1/2". Surface with wood decking to make all public entries handicapped accessible.
4. Install new 3 foot wide wood and glass door (for visibility) with outward swing.
5. Remove door. Install full wall display map of Park with information pamphlets etc. in compartments below.
6. Privacy fence at residence with gate to breezeway & courtyard beyond.
7. To Ranger's parking area

Interior Spaces

- **A** Visitors / Information
- **B** Ranger's Desk area
- **C** Ranger's Office/ Storage
- **D** Park Staff Meeting/ Lunch Room
- **G** Garage
- **S** Storage
- **R** Restrooms
- **M** Maintenance Room
- **H** CookHouse

Buddy Residence Rehabilitation

Occupancy Group B-2. Due to its small size (approximately 1,590 square feet), the code does not require any interior modifications due to the change of use. The new wood deck/walkway that connects to the CookHouse ramps up to provide access to the Ranger office entry. To improve the interior circulation and use of the building, the interior walls of the west end of the house would be altered. This would involve removing the restroom (adjacent to the breezeway) and the two closets to open up a space of approximately 400 square feet that would serve as the visitor contact point. Access to the rooms east of the contact point would be restricted to Staff only. This includes two additional offices, storage areas, a staff meeting/lunch room, kitchen and staff restroom. Once the new Visitor Center is constructed, the western portion of the building would provide additional office space.

Carriage House: This two story wood frame building includes a one story garage. The house is occupied with a life residency and was not inspected. Continued use as a residence and a future second ranger residence requires no code related upgrades.

3.9.2.2 Green Barn: This single-story, wood frame barn was built circa 1900 to store farm equipment. The barn has board and batten siding with a corrugated metal roof. It appears structurally sound though over the long term its continued stability is threatened if nothing is done to stabilize the eroding stream channel to the east. See Section 4.2.2.2 for discussion of revegetation for San Felipe Upper Riparian Forest. Structural investigations and modifications would be required to meet seismic considerations for occupancy of the structure. It is proposed that the barn be developed as part of the interpretive program as a display area for ranch implements that are visible from the opened doors. The current use of general storage would need to be relocated to the maintenance yard where storage space is already at a premium (see Section 3.9.4.3 Maintenance Yard.)

3.9.2.3 Green Corral: The date of construction of the small structures, chutes and pens known as the Green Corral is unknown. It was once used as a corral for branding cattle. The master plan proposes adaptive use of this area for equestrian staging. This would involve a more detailed assessment of the

condition and safety of the pens and structures by the County risk manager in order to allow horsemen to use the facility.

3.9.2.4 Grant Ranch Equestrian Complex: Seven of the structures in the stables complex were built in the mid 1800's as part of the original J.D. Grant residence and ranching operations. These include the Ranch Hands CookHouse, the Ranch Manager's House, the Bunk House, the Wagon Shed, Blacksmith's Shop, Implement Shed (also known as the Pala Barn), and the Grainery (also known as the Joquine-Marietta Barn). Most of these structures have received remodeling and some adaptive use. The Ranch Manager's House was remodeled in 1980 and would continue to be used as the stable manger's residence. Portions of the Ranch Hand CookHouse were remodeled in 1990 for use as housing for stables employees. The wagon shed originally used for storage was recently remodeled to add six standing stalls over a new concrete floor. The Implement Shed once used for storage is now also a stable for horses. The Blacksmith Shop is now used as a tack rooms and the original Grainery is used as a workshop. These uses are designated to continue in the Master Plan as they are reminiscent of the historic uses of the structures. On-going maintenance and restoration of these historic structures should be a joint effort of the Leasee and County Parks. Any remodeling of the structures by the Leasee will need to be approved through a County Parks review process.

3.9.3 Unoccupied historic structures: The park includes several structures that have historic value, but are either not conducive to any park uses or would require extensive work to bring them up to public occupancy standards. These structures should be retained as long as their historic value and integrity outweighs their potential liability. They include the Tankhouse, "Rat-proof" Storage Shed, and Water Tanks associated with the Ranch House Complex; the Washburn & Snell Barns; several historic fence lines, windmills and tanks; and the "ruins" of the Line Shack and Snell homestead. The two barns should continue to be used for storage (if feasible) to keep them in the active maintenance system for as long possible. The other unoccupied structures should be retained in their existing conditions with intervention undertaken only to make the resource more stable over the long term. The Environmental Impact Report recommended that these structures should be inventoried and evaluated for historic importance and an application for official State or National Register

Historic Designation be prepared. As a part of the historic inventory, a detailed study should identify the costs of maintaining these structures. This study should also determine appropriate rehabilitation measures, or indicate if the structures should be removed when they become a hazard to public safety.

Two structures in the Park would require extensive restoration if they were to be maintained; the McCreery Cottage and the Green Stables. The McCreery Cottage, also know as Casa McGee or the Casa House, was moved to its present site by the San Felipe Creek. While it meets the age requirement for establishing State historic significance, it is an unassuming single story wood frame structure of no outstanding architectural or historical merit. The loss of integrity due to the structure's relocation and remodeling; its physical location within the 150 foot creek setback; the floor plan of small spaces not conducive to public use and the associated expense of renovation lead to the initial recommendation that the Casa House be demolished. The Green Stable is a small wood frame structure located on the East side of San Felipe Creek north of the Green Barn. The structure is precariously leaning into the creek channel. It currently poses an attractive nuisance and should be demolished. Prior to the demolition of these two structures a detailed assessment would be prepared and reviewed to comply with the County demolition policy.

3.9.4 Non-historic structures:

3.9.4.1 Entry Kiosk: The entry kiosk was built by the Park Department and dedicated in 1989. This design serves as a standard for the County. The kiosk would continue its role as primary visitor contact point during weekends and peak use periods when it is staffed.

3.9.4.2 Bonhoff Residence: The Bonhoff residence, a one story wood frame structure is currently undergoing renovation to serve as a permanent ranger residence. There are two associated structures adjacent to the house. The small cabin would be used for storage.

3.9.4.3 Maintenance Yard: The maintenance yard contains an open implementation shed built in the 1920s; a recently installed toxic storage area; and a newly built metal "Butler Building" that houses equipment, an office and work space. The fenced yard also contains an underground gas tank. As the Park develops and additional manpower and equipment are acquired, new structures would be

required in the maintenance area. The existing workshop capacity of the "Butler" Building is limited with poor sound isolation. Storage space is at a premium, and when the Green Barn is re-utilized as exhibit space additional covered storage would be required. The dead-end circulation pattern of the maintenance yard needs to be improved by relocating the fenceline to allow circulation around the west of the implement shed.

All new development in the maintenance yard is proposed towards the south and west, and outside of the 150 foot creek setback requirement. The long term goal is that all maintenance operations will be located outside of the 150 foot creek setback. Runoff from the maintenance yard must be collected and treated before discharge into the adjacent drainage areas to comply with County water quality ordinances. The underground gas tank should be abandoned/removed for an above ground model. All tanks used for storage of potentially dangerous substances, such as gasoline or diesel fuels, should be easily monitored and located outside of the creek setback. All new development in the maintenance area needs to be particularly sensitive to the environmental and cultural resources of the maintenance meadow.

3.9.3.4 Existing Restrooms: There are five existing public restroom buildings in the Park. The restrooms are standard park design of slump stone block with metal roofs. The facilities are connected to the Park's water system and each location has its own septic system and leach field. New restrooms and modifications to the existing facilities are proposed for the Master Plan and discussed in Section 3.8.2.

3.9.5 Infrastructure Improvements: Most of the infrastructure systems that serve the park are based on earlier ranch installations with County improvements over the last 10 years. Because most infrastructure improvements required work that disturb the surface, all new development needs to be particularly sensitive to the environmental and cultural resources. Site specific investigations and monitoring need to be a part of the preparation of construction documents and actual construction operations.

3.9.5.1 Vehicular Circulation and Parking: Most of the roadways and trails are generally well maintained and meet the needs of the proposed Master Plan. A paved road is proposed on the eastern side of the San Felipe Creek. This one-

way, 15-foot wide loop road provides access to the Ranch House and Picnic areas and their associated parking previously described. All asphalt roads should be designed and constructed on a graded compacted gravel base with provisions for surrounding site drainage and to maintain water quality. Other proposed road improvements include paving the portion of the existing historic Mt. Hamilton Road on the west side of Main Meadow and revised road alignments in the campgrounds. Visitor's vehicles would continue to be restricted to the paved roads.

The trails throughout the Park provide both access to the rangers for monitoring use and maintenance, as well as serving vital roles in fire control. The multi-use and shared trails would be maintained as graded dirt a minimum of 12 feet wide with 16 foot overhead clearance as a fire protection measure. Proposed trail improvements include realignment, re-grading and drainage control to meet the established standards outlined in *Section 4.2 Trails Program Development..*

3.9.5.2 Grading and Site Drainage: Assessment of potential grading and drainage problems throughout the park can not be considered conclusive since the site evaluation during Master Planning process occurred during a five year period of drought. However, the Master Plan sets forth the policy of avoiding major earth moving operations to incorporate the proposed development. Low lying areas should be avoided where possible, and the nature of existing drainage patterns and seasonal drainages acknowledged. Several potential wetlands areas are acknowledged in the report and their resources are to be protected from recreation activities and maintenance operations that might lessen their natural ecological values.

Drainage problems were indicated in the Stables Complex and have been addressed in plans prepared by County engineers. These improvements are to be incorporated in the Master Plan implementation.

3.9.5.3 Utilities: Existing utilities include a potable water system of wells and distribution pipes, electricity provided by PG&E, a propane gas system and septic drain field for each of the public restrooms.

Potable Water System: There are two working wells on the Park property. The present operating system consists of Well #1 providing water to the storage tank located on the hill east of the Woodland Youth Group Camping area. This tank is

connected with 6 inch gravity flow mains to the Ranch House Complex, Stables and restrooms in the Main Meadow. A two inch gravity flow main serves the campgrounds and their restrooms. This two inch line was apparently installed incorrectly due to the number of breaks in the system, and needs to be reinstalled. The second well is in close proximity to the first well and should be connected to the storage tank at the same time as the construction of the waterlines for the new restrooms. The water from the Well #1 would continue being tested for bacteria and turbidity on a quarterly basis by the Santa Clara Environmental Health Department to fulfill the local health code requirements. The second well would also be monitored once it is added to the system. A valve system should be added to the water tank that would prevent the tank from being accidentally drained should there be a break in any of the water lines.

There are many sources of non-potable water in the Park that were documented in the Program Report including streams, natural springs, stock ponds and tanks, and three operating windmills with storage tanks. These water sources are invaluable for equestrian users, wildlife and stock that are grazed in the park. However, the park visitor needs to be notified that these are not potable sources and that they need to pack in adequate water.

Electricity is provided with separate service meters at the Entry Kiosk, the Ranch House Complex, Stables Complex, Bonhoff House, Maintenance Yard and at each public restroom. New electrical service would be required for the new restrooms (except for the chemical restrooms), and at any permanent telescope housing on Halley Hill. These facilities are relative close to existing service areas and the electrical service should be able to be extended underground relatively easily. In order to preserve the dark and clear night skies for astronomy programs and amateur activities all lighted facilities need to take into account the following recommendations: minimize lighting; use low pressure sodium lighting and shield the openings in restrooms to minimize light spilling out of the building; and restrict use of the outdoor amphitheater that requires stage lighting after 10 PM. Any illumination of the park and traffic headlights that introduces additional light also would be of concern to the Lick Observatory.

Propane: There are several propane tanks located in the park, one at the maintenance yard and one at each of the two campground areas for heating water. The County has contracted with a service inspector to supply and inspect

these units. Each of the residences on the property have their own propane service. Additional propane tanks would be required for showers in the two proposed restrooms in the campgrounds.

Septic Tanks & Drainfields: There is no sewer system in the Halls Valley. Each of the existing restrooms have their own septic tank and leachfield as documented in the Program Report. The existing system is functioning adequately and maintained on an "as needed" basis. New restrooms would require septic leach fields near the San Felipe Group Area, Woodland Group Youth Area and Woodland Campground. The relocated restroom at the Stockman's Group Area should utilize the existing nearby fields, if possible. The design of the proposed restrooms would need to ensure that the septic systems comply with the both Santa Clara County Department of Public Health and Regional Water Quality Control Board requirements, and that ground water quality is not adversely affected.

3.9.5.4 Fencing: The park property has numerous fences on the property including a perimeter fence on the north, west and south boundaries, pig control fences around the Ranch House Complex, and fences that delineate each of the named grazing fields. In addition to the fences currently utilized to divide active grazing fields there are a number of old or unused sections of fence throughout the park. These locations provide historic record of past land use patterns and should be documented as to location, type, materials and photographed prior to their removal or deterioration.

On each of the trails that cross fence lines there are a variety of gates, and crossing stiles. Many of these stiles are not easily accessible to bicyclists or the disabled. The gates on the multi-use and shared trails need to be review on an on-going basis and upgraded to improve/maintain their accessibility. Additional proposed fence improvements include maintenance of the pig fence around the Ranch House complex and a new fence if the level of irrigation of the multi-use/polo field attracts pigs to the playing area.

3.9.5.5 Bridges, Culverts and Stream Crossings: Bridges in Grant Ranch Park consist primarily of nine foot bridges located on trails as they cross the San Felipe Creek. These bridges should continue to be monitored and upgraded if they become hazardous. The two bridges located adjacent to the main meadow should be rebuilt to be accessible, as the picnic areas developed. Additional bridges (and

potentially boardwalks) are proposed for the Whole Access Trail, the Nature Trail and the Environmental Education area adjacent to Grant Lake. There are two vehicular crossings of San Felipe Creek proposed in the Main Meadow, one of which is a culvert and the other a wooden bridge. Most of the trail crossings are not grade separated from the seasonal and back-country streams. As the whole access trail is developed and use of the other trails increase, bridges and separated crossings should be incorporated. These crossings can range from fully accessible bridges, culverts or stabilized fords. During final trail design, each crossing should be assessed to minimize the impact on the surrounding ecosystem while providing for recreational and maintenance access.

3.9.5.6 Signage: Signage in the park can be divided into three general categories: directional including maps and location devices; regulatory such as the posting of boundaries, no parking and restricted access areas; and interpretive or educational signs. The Master Plan encourages the Park to minimize the number of signs and locate them in areas of more intensive activities where possible. County standard signs should be utilized where appropriate to maintain the connection to the rest of the system. *See Section 4.3 Interpretive Program Development.*

3.10 Requirements of the Federal Americans with Disabilities Act

The Federal Americans with Disabilities Act (ADA) is comprehensive anti-discrimination civil rights legislation requiring that all public programs be accessible. The law does not mean that the whole park must be accessible, but rather that each type of activity or program within the park must be accessible. This is not a new concept -- the California state law commonly known as *Title 24* has had provisions for the removal of "architectural barriers" since 1970. The Federal ADA law became enforceable on January 26, 1992. However, there have been no specific guidelines formally adopted in California (or at the Federal level) for making parks accessible. Once these guidelines are available, the recommendations proposed in the Master Plan should be reviewed to ensure that the County is making all efforts to conform to these new standard practices.

The law permits capital improvements to be phased over several years. However, it is clear that the improvements should be prioritized on the basis of greatest benefit achieved as defined in the law. The work at Grant County Park should be an integral part of system-wide improvements to Parks throughout Santa Clara County. In new

buildings all areas must comply with the law. For existing buildings and facilities the priorities as listed by the law are:

1. Access from public sidewalks, parking or public transportation
2. Access to areas where goods and services are available to the public
3. Access to restrooms facilities and
4. Any other measures necessary to access goods and services, privileges, advantages or accommodations

For additions or alterations to buildings the priorities also include access to public telephones and drinking fountains. The law also states the "where barrier removal is not readily achievable, the goods, services, facilities, privileges, advantages or accommodation must be available by alternative methods."

3.10.1 Parking

Accessible public parking spaces should be clearly designated in each of the parking areas around Grant Ranch Park. The ADA establishes required number, dimensions and signage for these spaces. Each of the designated spaces should be as close to the destination (picnic area, restroom, trailhead, visitor center etc.) as possible. The following table indicates the number of total spaces in each general parking area, the nearby destination and the minimum number of accessible spaces. At least one designated space in each parking area must be "van accessible" and meet the required horizontal and vertical clearances.

It is important that the designated parking space is connected to a continuous accessible route or "path of travel" to the destination. Curb ramps must be provided and any other obstacles removed.

Accessible Parking Spaces Required by ADA

Total Spaces	Minimum Number of Accessible Space
Grant Lake Staging	
20	1
Twin Gates Staging	
20	1
Smith Creek Staging	
20	1
Edward's Field Staging	
5	1
Oak Grove Parking - By Ranch House	
60	3

Total Spaces	Minimum Number of Accessible Space
Ranger & Maintenance – By Ranch House	
10	1
Oak Woodland – Picnic Areas	
100	4
Meadow Parking– West side of Meadow	
20	1
Stockman's– Group Area	
90	4

Total Spaces	Minimal Number of Accessible Space
Grant Stable - Chuckwagon Group Area	
30	2
Campground Amphitheater	
20	1
Halley Hill - Astronomy Programs	
5	1

3.10.2 Access or "Path of Travel"

As a part of parking, top priority should be given to establishing a way to get to and from parking areas and destinations within Grant County Park along an accessible "path of travel." An accessible "path of travel" ensures a continuous, unobstructed, hard surfaced route. The route from the designated parking areas should be one of the first projects in the ADA related improvements. The path of travel should incorporate curb cuts, ramps and bridges as required to ensure accessibility. All of the public buildings must be linked by accessible routes from designated parking spaces to the accessible building entrances. Park amenities should also be accessible via one or more "paths of travel". As new portions of the Master Plan are implemented, it is important to ensure they are connected to other elements by an accessible "path of travel."

3.10.3 Park Amenities

The second priority focuses on access to goods and services; at Grant County Park this includes the amenities and programs. Within the Park, amenities such as drinking fountains, telephones, picnic sites, campsites, information boards, benches and trails should be made accessible. Accessible drinking fountains should be provided on the exterior of each restroom building. Fixtures should be provided to accommodate both adults and children. If public telephones are provided in the Visitor Center, Campgrounds, Equestrian Center etc., each telephone location should have at least one accessible phone that meets the ADA requirements for mounting height, clearances and equipment (volume control, push buttons, cord length, etc.). Accessible campsites should be designated at each of the camping areas. These sites must be located with an accessible path of travel to the accessible restroom &

shower facilities. In addition to the campsites themselves, check-in and information must also be made accessible.

At each accessible picnic area at least one table in every grouping should have the ability to accommodate a wheel chair. Mounting heights, "reach" range requirements, and clearances around picnic amenities, such as trash cans, benches and barbecues, should be designed/selected to accommodated a variety of user abilities. Other Master Plan programs such as the astronomy site at Halley Hill, amphitheater, fishing pier at Grant Lake, polo viewing area, equestrian arena viewing area must be able to accommodate visitors of all abilities. Architectural barriers that are structural in natural must be removed where "readily achievable" during the design of these features.

The Trails Development Standards *(See Section IV)* discuss in detail the development of accessible trails throughout the park. It is equally important to indicate those trails where stairs or steep slopes or other physical barriers obstruct access. Amenities along the whole access trails system, such as staging areas, gates, rest areas, bridges (or other stream crossings) must also be accessible.

3.10.4 Restrooms

The third priority listed in the law focuses on restrooms. Since the restrooms are widely dispersed throughout the Park, each facility should be developed to meet the accessibility requirements (one toilet and 1 sink at each of the woman's and the men's facilities location). This includes shower facilities in each of the three campground, as well as the restrooms throughout the accessible areas of the park.

Finally, the law lists any other barriers to accessibility. This category of barriers includes such things as the entry kiosk counter that is too tall or out of reach, and requires park ranger to come out of the booth to provide the visitor with information. It also includes more complex accessibility issues as the second floor of the Ranch House that is used as office space for Park Workers. The law does allow for "Alternatives to barrier removal" by providing equivalent facilitation. However, where the removal of existing barriers can be "readily achievable without much difficulty or expense" the law does not permit providing such alternatives.

The Master Plan has incorporated many of the elements required to fulfill the requirements of the Federal Americans with Disabilities Act. A more detailed study that reviews the compliance of the existing features of Joseph D. Grant County Park has been completed in conjunction with the Master Plan. During implementation and design of the Master Plan the specific technical requirements of the law will need to be

addressed. The removal of barriers will be an on-going process throughout the life of the Plan. What may not be readily achievable now, may be at a later date. During the life of the Master Plan, it is anticipated that more detail guidelines will be developed and the standards of Park and Recreation management will change. The Master Plan recommendations will need to remain flexible to be able to respond to future modifications of the law.

Section IV - Program Development & Management

IV. Program Development & Management

4.1. Program Development & Management

The physical elements of the preferred Master Plan discussed in the previous chapter described in detail the long range vision of the appearance of the Park and its use. This chapter establishes the goals for program development and the long range management of the resources. It focuses on the protection of natural and cultural resources and values, while encouraging compatible recreational and educational uses.

4.2 **Trails** (See Section 3.4 and map and chart on pages III-12 and III-13 for description of trails system.)

4.2.1 Development Guidelines

The trails in the plan are shown conceptually. During the final planning of trail alignments, site specific assessments should be made to ensure that trails avoid environmentally sensitive sites, such as archaeological sites or wetlands, avoid erosion, sedimentation and limit vegetation disturbance. Trails should maintain the 150 foot development setback from the center line of San Felipe Creek and Smith Creek (except for crossings). Where avoidance of these sensitive areas is not possible, trail construction should use best management practices, such as erosion control, fencing of sensitive areas and monitoring during construction to reduce or eliminate impacts. To maximize accessibility and protect sensitive areas trails that connect major activities or program elements should be reviewed to see if they should be hardened. These trails would include those connecting the visitor center to parking areas, the first loop of the whole access trail and trails to the Grant Lake picnic area and environmental education area. The goal is to maintain as "natural a trail" as possible. Potential trail surfaces including boardwalks decomposed granite, soil stabilizers or asphalt paving.

Final trail alignments should not be directly routed up steep slopes. Switchbacks or rock steps should be employed in steep terrain as a last resort alternative when it is not feasible to create a trail. that follows the contours of the land Switchback turns should be well drained and designed to discourage "short cuts" between trail levels. Trail alignments need to consider not only the overall grade, but also cross slopes. Final alignment should balance design requirements based overall trail length, potential user and accessibility requirements, soil type, trail drainage, and potential erosion. The trails should be constructed so that streams and natural drainage flows are not diverted or interrupted. Unbridged stream crossings should be approached at an angle pointing downstream to minimize trail erosion.

Multiple-use Trails and Shared Hiking and Equestrian Trails: are a "double-track" trail with a minimum eight foot width. Where trails serve as firebreaks they should meet the criteria established in Section 4.4.2.3 (12 foot width and 12 foot height clearance). These trails can also be used for operations and maintenance purposes. The following graphic illustrates the design guidelines for the double track trails.

Hiking Trails: are a "single track" trail with a minimum four foot width. The following graphic depicts the guidelines for the hiking trails.

Whole Access Trails: are designed for access by all people, including those with disabilities. Three whole access trails would be developed throughout the valley's floor *(see Section 3.4.3).* A minimum width of six feet should be used for the two nature trails. Due to the environmental sensitivity of the areas adjacent to these trails, only pedestrian use will be permitted. The third whole access trail loops will be multi- use and a minimum 12' width should be used. These trail loops also provide nearly level bicycling opportunities for the novice and family use. The following graphic illustrates guidelines for the whole access trails.

4.2.2 Good Neighbor Policy

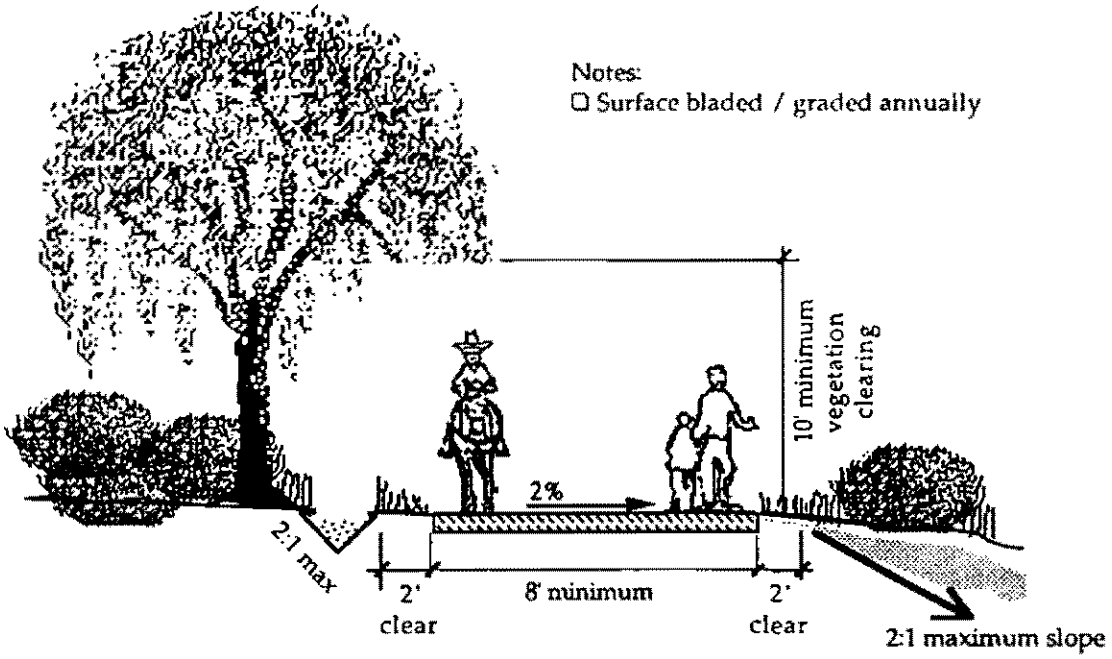
The park has several trails near the park's boundary that should be developed and managed with a good neighbor policy. These include:

- portions of the Washburn Trail (existing)
- the majority of the Dutch Flat Trail (existing)
- the Smith Creek Trail (existing)
- the Manzanita Trail (new)
- portions of the Bay Area Ridge Trail (existing and new)

The existing trails near the park boundaries are a critical and sensitive part of the trail network. These trails are a part of the historic ranch circulation patterns and are used by a wide variety of park visitors. In many cases the trail location and alignment occurs near the fenceline because alternative routes were not feasible when the original ranch roads were established. In some instances, it may be feasible to realign portions of these trails to improve relationships with adjacent property owners or to resolve specific physical problem areas. It will be important to balance the goals of good neighbor policy with the needs of park users and potential environmental impacts of realignment.

The following guidelines should be used, <u>where possible</u>, in the management of the boundary trails and in the detailed siting of <u>new</u> trail alignments:

- patrol on a daily basis during heavy use periods



Typical Multi-Purpose Trail

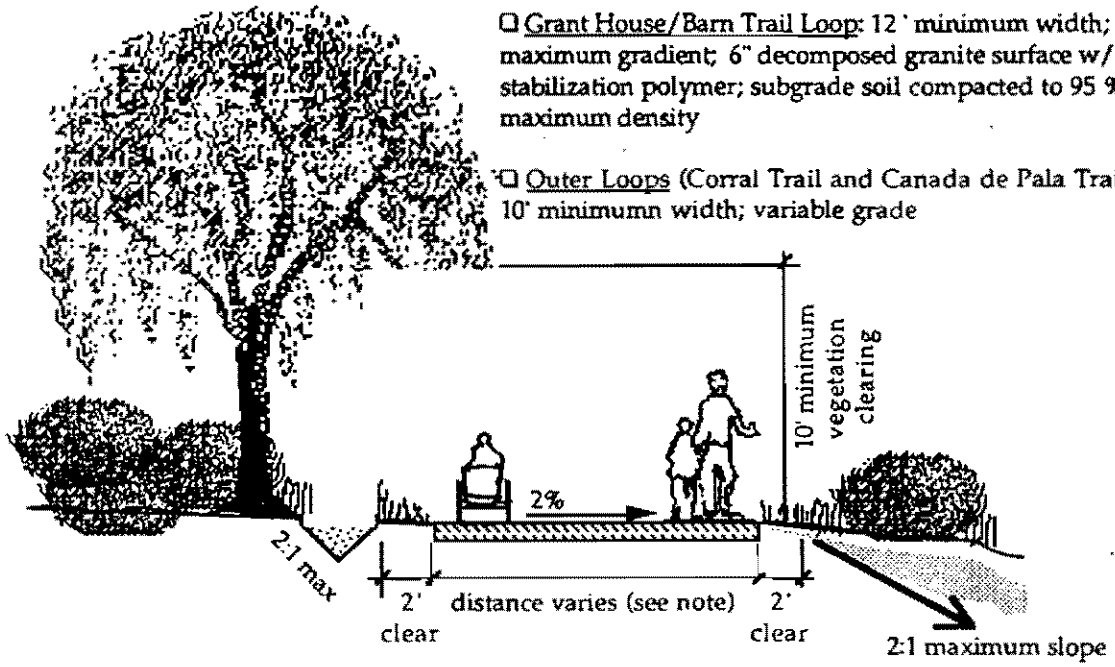
Equestrian, Mountain Biking, and Hiking Trail

Notes:

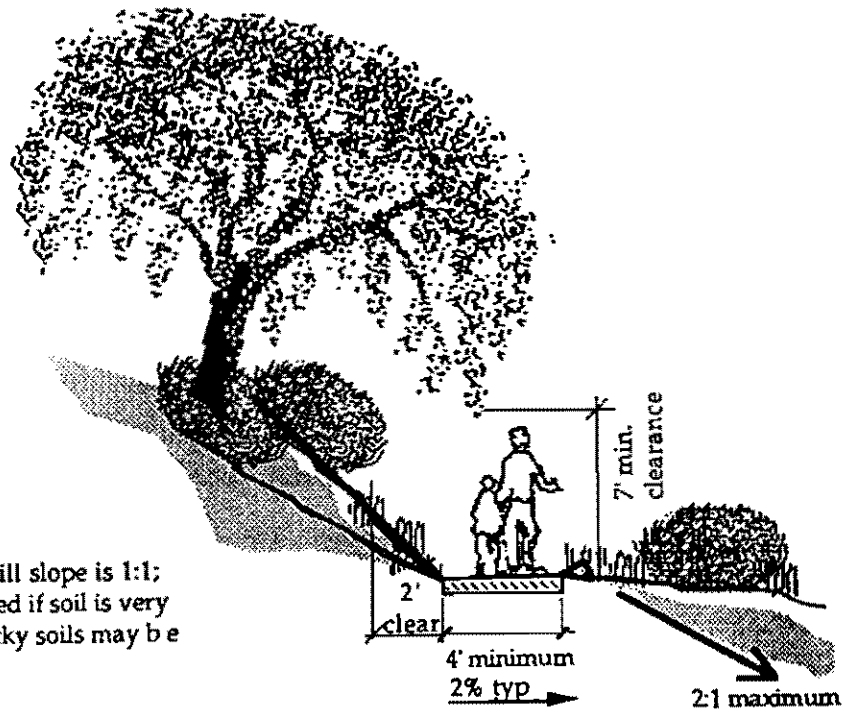
❑ Grant House/Grant Lake Loop/ Grant Lake Education Trail: 6' minimum width; 5% maximum gradient; 6" decomposed granite surface w/ soil stabilization polymer; subgrade soil compacted to 95 % of maximum density

❑ Grant House/Barn Trail Loop: 12 ' minimum width; 5% maximum gradient; 6" decomposed granite surface w/ soil stabilization polymer; subgrade soil compacted to 95 % of maximum density

❑ Outer Loops (Corral Trail and Canada de Pala Trail): 10' minimumn width; variable grade



Typical Whole Access Trail



Notes:
- Average uphill slope is 1:1; 2:1 recommended if soil is very loose; hard , rocky soils may b e 1/2:1 slope

Typical Hiking Trail

Destination Points

- locate any new trails a minimum of 300' from property lines (were feasible) and/ or separate trail alignment from property fencelines by locating the trail on the opposite side of hills or drainages.
- sign and maintain fences where trail falls within 300' of property lines

4.2.3 Trail Monuments / Point-to Point System Signage

The existing signage system for the Park trails is not consistent. Little directional or orientation information exists to aid the first-time or infrequent park visitor. No hierarchy of trails exists. To remedy these shortfalls, a system of trail signs should be used to provide a point-to-point direction for the park visitor. A sign should be located at each trail intersection in the park with mileage figures provided to:

- Grant Ranch House
- major park destination points found in the general direction of the particular trail (i.e. trailhead, visitor center, Line Shack, Pig Lake)
- next trail juncture.

By providing the distance to the Grant Ranch House on each sign, the overall orientation of the visitor would be enhanced. The signs would follow the existing Park Department signage standards and typically be constructed of routed wood.

4.2.4 Field Signage

In addition to signage needed to direct the trail users, individual "fields" would be labeled with a simple metal sign, hung on both sides of the fence, anytime a trail crosses fence lines. This would strengthen the users sense of place as well as connect them to historic uses of the Park.

4.2.5 Related Trail Improvements and Facilities

There are a number of related trail improvements that could be made to provide a safer, more efficient trail system. These include:

Gates: Where trails cross all field fencelines, self-closing swing gates capable of being latched open should be installed. Gates must be designed to be accessible to all users.

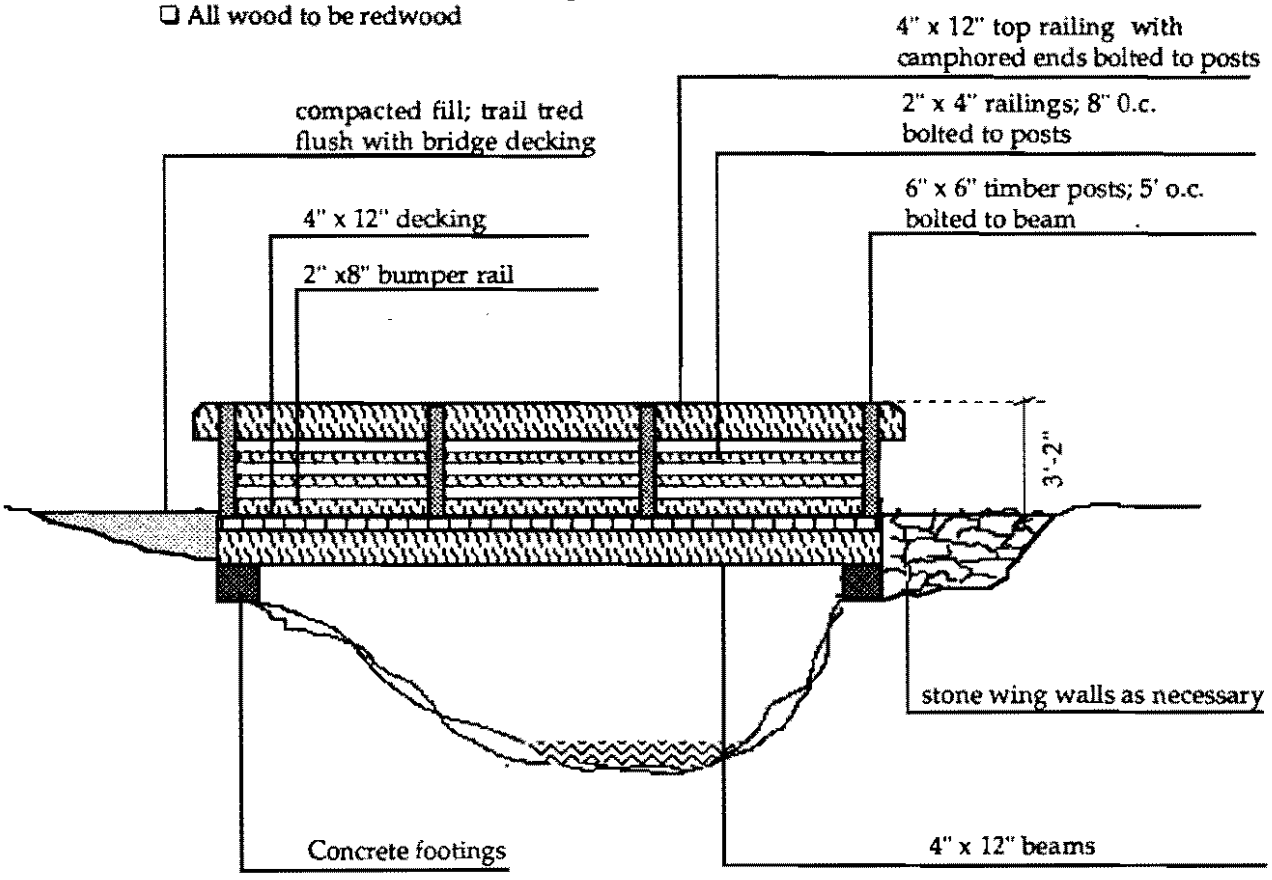
Destination Points / Rest Stops: picnic tables and hitching posts should be located at key destination points throughout the park. (see map page IV-6).

Rest Areas: should be placed along all whole access trails, with an average placement of every 1/8 mile. These areas should include a bench and pullout for wheel chairs or strollers.

San Felipe Creek Bridges: Generally the trails of Grant Park would avoid the use of bridges in crossing stream channels. However, San Felipe Creek is crossed a number of times by the whole-access trail system. Because of the meandering and braided

Notes:

- ❑ Width varies:
  - Grant House/Grant Lake loop: 5' width inside railings
  - Grant House/Barn Trail loop: 8 ' minimum width inside railings
  - Outer loops (Corral Trail and Canada de Pala Trail): 8' minimum width inside railings
- ❑ All wood to be redwood



Typical Bridge

San Felipe Creek Bridges

nature of the creek, and the potential for flooding, each crossing should be individually engineered. The graphic on page IV-8 depicts the minimal bridge design guidelines for whole access trails that cross the creek. Where culverts are utilized the minimum size should be no less than 18" to reduce the maintenance required to clear trapped debris.

4.2.6 Trail Development Priorities

The current system of trails generally serves the park users. With a few exceptions, the trail system provides access to most areas of the park. Most trails are double track. Throughout the existing trail system minor gullying, erosion, and vegetation intrusion should be rectified. All trails should be upgraded and maintained to basic standards, regrading on an annual basis as needed. In addition to the meeting basic standards, new trail designation or construction includes:

Recognition of Existing Trails: (See map and chart on pages III-12 and III-13 for existing trail system): A number of trails are well used, but not officially recognized. These should be signed, managed, and patrolled. They include:

- Smith Creek Trail (fire station to approximately 1/2 mile upstream; hiking only)
- Heron Trail (linking Dutch Flat with Edwards Trail; riding and hiking only)
- Lower San Felipe Trail (linking the Main Meadow with the Snell Barn; multiple-use)

Re-alignment / Re-contouring Trails: Certain trails, because of their steepness and condition, discourage use. These should be re-aligned or re-contoured to reduce steep grades and improve trail condition (such as ruts, water channels or erosion). As these trails are re-aligned, the old trail should be scarified, replanted and if necessary signed to discourage continued use. See Existing Trails/ Renovation Project on page IV-9. They include, in order of priority:

- Pala Seca Trail (near intersection with Canada de Pala Trail)
- Barn Trail, Corral Trail and San Felipe Trail to accommodate whole access design requirements
- Los Huecos Trail (lower sections)
- Bohnhoff Trail
- Canada De Pala Trail (first 1.8 mile from Mt. Hamilton Road)
- Manzanita Trail (from intersection with Bohnoff Trail to property line)

During the life of the Master Plan there may also be trails identified for re-alignment due to issues related to public use, security, property ownership, emergency access or for reasons other than purely physical impacts. As these trails or trail segments are

Existing Trails / Renovation Projects

identified for realignment it is important to understand their role in the trails system. The trails are one of the primary resources in the park. They provide access throughout the park. Through years of visitor use access to the trails become a "public expectation" that is critical that this park provide. It is important to maintain the variety of trail types, as well as trail links throughout the park. As a policy, it is desirable to identify and realign as limited a portion of the trail as necessary to resolve issues. These trails should not be viewed as new trails, but rather improvements to the existing trail network.

New Trails: New trails should be developed to provide access to under used park resources or to link existing trails. These include, in order of priority:

- Lower San Felipe Creek Trail (extension to Canada de Pala Trail; multiple-use, whole access trail)
- Lower Hotel Trail (from Snell Barn to San Felipe Trail; multiple-use, whole access trail)
- Grant Lake Education Loop Trail (hiking only)
- Bernal Trail (from Grant Lake to Washburn Trail; multiple-use)
- McCreery Lake Trail (from Grant Ranch house by McCreery Lake to Halls Valley Trail; riding and hiking)
- Windmill Trail (from Tanyen Trail through Halls Field to Halls Valley Trail; hiking only)
- Bass Lake Connector (to link with Yerba Buena Trail; multiple-use)
- Edwards Trail Connector (riding and hiking)
- Antler Point Trail (a spur to the highest elevation in the park multiple-use)
- Smith Creek Overlook (a spur trail off the Pala Seca Trail to a knoll overlooking the Smith Creek drainage; multiple-use)
- Manzanita Trail (from property line to Pig Lake and the Hotel Trail; multiple-use).

4.3. Interpretive program development

Development of a successful interpretive program requires a long-term commitment of vision, physical manpower, equipment and budget. It should be an on-going process of building upon the existing program and County resources. The process should reach beyond current boundaries and elicit involvement from the larger community including grants; private sponsorship, investment and commitment; and cooperative programs with local tribal members, special interest-groups or universities. For the convenience of discussion the interpretive programs have been divided into natural and cultural programs; however, in actuality the boundaries should be purposefully blurred. The interpretive program for Grant Park should focus on the interaction of the park's natural and cultural resources. The program should illustrate the connections between

Joseph D. Grant County Park
NEW TRAILS
Smith Creek
Manzanita
Lower Hotel
Lower San Felipe
Bass Lake
Brook Camp
See Main Meadow Plan
McCreary Lake
Smith Creek Overlook
Stables
Grant Lake
Horse
Wyandotti
Pala Seca Camp
Bend
Edwards
Antler Point
North
Scale
0'
1000'
2000'
3000'
Park Boundary
Lake / Pond
Existing Trails
New Trails
- Hiking, Equestrian, Biking
- Hiking and Equestrian
- Hiking

New Trails

the natural systems and lifestyles of those who lived in this valley. It should also explore how these resources are representative or different when compared to other natural and social systems. A successful interpretive program would be of value not only for resource protection and the general education of park visitors, but also would continually improve the public image of both the Park and County. These programs would offer the opportunity to communicate the values and stewardship of natural and cultural resources. They would also develop community understanding of the Park's management and practices, thereby encouraging general support for the Parks system.

The development of the interpretive program should be multi-faceted in both its program content and communication methods. Existing interpretive activities at Grant Park rely primarily on human interaction, including ranger led programs, special interest programs (such as the formal and informal astronomy activities; and unprogrammed interaction with cattle leasee's and stable's activities. Existing written materials are limited to trail maps and information/warnings signs describing potential hazards (such as Lyme ticks). The Ranch House includes a small interpretive center with displays of Grant family photographs; animal exhibits, photographs and maps; some archaeological artifacts; a small table-top aquarium; and some furniture and farm tools from the Grant Family. These displays have been assembled over the years by various parties and have undergone recent changes due to rehabilitation work on the interior of the house. The existing center lacks comprehensive coverage and articulate organized exhibits, but provides the beginnings of the interpretive program.

In developing the interpretive program it is important to understand the Park Visitor's needs and expectations. Many of the visitors come to the park for respite from the urban environment, and to enjoy the scenery and the opportunity to interact with nature. Their primary needs are orientation and activities information; without high expectations of educational programs. The park has the opportunity to exceed these expectations with the systematic development of interpretive events.

The Park's program should compliment those of nearby parks, agencies and institutions, including State Parks and East Bay Regional Parks District (EBRP). The Supervising Naturalists and local community groups associated with these parks can offer invaluable assistance about the development of interpretive programs that deal with issues identical to those at Grant Park, such as historic structures, ranching or agricultural activities, Native American culture and local ecosystems. The best local resources include:

Mount Diablo State Park. This program focuses on the concept of an "inland island." The guiding concept is based on the physical dominance of the mountain, its unique climatic, floral and fauna conditions and the fact that the mountain sits in the middle of an increasingly urban area. Cattle handling programs are a part of the grazing leasee's contract. The programs are coordinated between the leasee and Rangers, with the leasee's operations incorporated into interpretive events.

Ardenwood Historic Farm (EBRP) The program centers around the re-creation of agricultural activities during the period between 1870-1920. The site includes house tours of the historic Patterson House which has been restored by the City of Freemont.

Black Diamond Mines (EBRP). The program includes a museum dedicated to coal and silica mining between 1855 and 1949. Guided tours through an authentic sand mine and the cemetery are the most popular events. Even though the focus of this park is on mining, the naturalist programs, including biological and geological resources as well as the culture of the original Indian inhabitants, may provide some valuable insight for application at Grant Park.

Chitactac-Adams Heritage County Park (Santa Clara County): The Master Plan for this heritage park features the formation of a partnership with the Amah-Mutsun Tribe. Jointly developed on-site interpretive programs and comprehensive curriculum will reflect their rich ancestral heritage, pre-contact/aboriginal life ways, post-contact historical period and contemporary tribal revitalization.

Coyote Hills (EBRP): The program focuses on the Ohlone Indians, utilizing an open archaeological site and reconstructed structures. The visitor center has a central exhibit room that display Native American culture and the park's natural history and wildlife.

Sunol Regional Wilderness (EBRP): Naturalist programs emphasize the park's wildlife, Indian heritage and pioneer history.

The overall program design for Grant Ranch Park should utilize a variety of media, as well as the more traditional ranger or docent led activities. Programs emphasizing human contact are staff intensive, but often the most satisfying to the visitor due to their interactive nature. These could include ranger presentations in the campground amphitheater, docent lead tours of the Ranch House or site, educational programs with local tribe members, astronomy programs on Halley Hill and programs associated with live cattle-handling or stable operations. Development of packages of program guides and associated materials for use by individual group leaders in effect multiplies the available staff for interpretive programs. These guides can be for either remote or on-site activities. Instructor packets and materials should be aimed at schools and other organized groups. The most effective methods for reaching large numbers of visitors

are self guiding written and visual materials. These may include written trail or resource guides, regional publications, static or interactive displays, self guided tours, and audio-video programs. The messages can be delivered either remotely at the central visitor center, or site specifically through trail guides. The program should be developed to reach a wide range of ages and abilities. They should include interpretive methods that benefit the disabled or those with limited mobility such as elderly and young children. Materials that can be handled, audio-video programs or visual/ tactile displays that are not dependent on physical accessibility to remote portions of the site or the presence of ephemeral elements (such as wildlife) open the Park's resources up to many that may never able to experience them in other ways.

It is important that the County establish program standards to the control quality over program development. It is preferable to conduct a small number of high quality programs rather than allow a lot of activities to happen haphazardly without staff supervision. The process of program development can be used as an interpretive tool. Involving visitors in physical development of program resources / materials, while difficult to orchestrate, can be rewarding in not only staff enthusiasm, but also the public's pride of ownership and support of the Park. To successfully orchestrate an interpretive program the County needs to commit to hiring staff naturalists and/or consultants for research, and provide funds for support materials and display development.

The County should nurture long term partnerships with tribal members and special interest groups to develop interpretive programs both on-site and off-site. These programs may include involvement with the Muwekma Tribe or the special interest groups as those interested in astronomy, natural history, cultural history etc. Interpretive programs should not be limited to on-site activities. A comprehensive curriculum reflecting both the rich heritage of the site and addressing contemporary activities may also include off-site interpretive programs in the schools and other public forums.

Resource protection must a part of any program development. Visitors should be restricted from sensitive resources such as archaeological sites, endangered species, and wildlife nurseries. The best protection is to keep recreation activities and trails away from such sites and to generally avoid attracting attention to the resource. Fencing and signage should be the last resort. Education is an important secondary line of defense. *(see also Section 4.4.2 Cultural Resource Management).*

4.3.1. Natural History and Environmental Education: The park has abundant natural resources and provides ample opportunities for both remote and on-site activities. The interpretive program should build upon these existing resources and be coordinated with vegetation, watershed or fire management activities.. Programs should focus on the Park's ecological systems; illustrating the inter-dependency of the flora and fauna with the land's geomorphic characteristics and land uses. Ultimately the program should include displays in the visitor center, materials that can be used on the site such as trail guides or program guides for group leaders, as well as Ranger or docent led activities. The following are some of the subject areas and interpretive methods that could be utilized:

Natural History: Develop a self-guided trail brochure that discusses the general natural history of the Park with significant features explained and identified on trails maps.

Flora & Fauna: The program could depict not only natural patterns, but also the changes visible in the Park in the wildlife and plant communities that resulted from cultural practices such as the Ohlone use of fire; the introduction by the Spanish of cattle; and later settlement, land divisions, fencing and ranching practices. On-site programs could include development and use of the Grant Lake Environmental Area for group activities, and natural history programs such as nature walks or programs at the amphitheater. Self-guided tour brochures could be developed for the proposed whole-access nature trail to interpret the re-vegetation and management of the riparian corridor.

Geologic Processes: The process of faulting and tilting of bedded rock layers, rock outcrops and other signs of seismic, geologic or hydrologic activity occurring at the Park could be illustrated through displays or trail guides that identify evidence of past and current processes.

Astronomy: Both the formal and informal astronomy activities could continue to be developed, including displays for those visitors who do not visit the park at night. The interest of the local astronomy associations in conducting interpretive events provides the type of public involvement previously mentioned that can result in a unique visitor experience in the Park and augment the level of staff and expertise. Astronomy events should be encouraged at the amphitheater and Halley Hill site.

Mt. Hamilton Turnouts: Specific site information should be developed for each of the two identified turnouts on Mt. Hamilton. These simple display panels should familiarize the visitor to the scene before them as well as the natural and cultural history it represents.

4.3.2. Cultural History: The park is also rich with cultural resources including archaeological sites, historic structures and the cultural landscape. The interpretive program should build upon the existing resources to develop a program with an

emphasis on the visible continuum of the occupation of man and his interaction with the environment. The Ranch House would continue to provide exhibits documenting the human occupation of the property including the Ohlone Indians, Spanish land grants and the Bernal family, early Anglo-American settlers and the Grant family. The Program Report identified many display materials that could be included in these exhibits. Each exhibit should clearly identify the occupants with the park lands.

Perhaps the richest raw materials for the development of interpretive program are the visible remnants in the Park of past occupations. There are a variety of on-site interpretive program opportunities that could be identified for each historic period including:

Ohlone Period: Describe typical village site locations along San Felipe Creek, where Oaks, Bunch Grass or other endemic vegetation are readily visible. Coordinate with vegetation management efforts to enhance / re-establish endemic plant species. An active partnersip should be developed with Muwekma Ohlone tribal members to develop programs that express their rich heritage.

Bernal Period: Discuss the introduction of cattle to the property and cultural changes related to the establishment of associated European grasses and grazing. Relate to the visitor the size of original land grant. and its division into smaller holdings.

Anglo-American Period: Identify original Mt. Hamilton Road alignment, the Snell barn and house site; Washburn barn; historic fence lines and field names such as the Snell fields that all depict the smaller land holdings and lifestyle of this period.

Grant Period: The Ranch House Complex, Green barn, Grant stables, Green corral, and landscape features (Grant Lake, circle corral, stock ponds/ tanks, canals, Line Shack, windmills, and ranch roads) are representative of the culture and lifestyle of the Grant family..

4.3.3. Setting Interpretive program development priorities: The first step in the development of the comprehensive interpretive program should be the formalization of program standards, goals and priorities. The existing programs should be reviewed. Park Department's policies and standards should be developed for communication methods and techniques; research/ program content validation and review processes; joint programs with tribe members or special interest groups; program identification; public outreach; and program quality monitoring. Priorities need to be set for program development. As the priorities are being formalized, a foundation for program development should be established that includes general information regarding the natural and cultural history of park; on-going improvement of existing information and displays; and the formalization of programs with leasees and interested groups.

4.4. Resource Management:

Resource management involves a multitude of specialized information and sensitivities, and has traditionally been divided into the three categories: recreational, natural and historic resources. These categories continue to be helpful in organizing a discussion of the characteristics and values of resources in the park. However, the application of management strategies to Park lands must take a holistic approach based on a full understanding of the resources collective characteristics, limitations and interactions. Management practices would often lead to value judgments as priorities for protection or intervention are established to resolve resource protection or use conflicts. While some decisions may be relatively easy, such as the relocation of a restroom to protect an archaeological site, others may be extremely difficult such as the level of enhancement for waterfowl versus the maintenance of water quality for fish. Conflict resolution is an ongoing part of resource management and the answers must lie in the resources themselves. The underlying strategy must be based on the protection and preservation of all of the resources.

The resource management strategies discussed below identify primary issues and potential methods for management. The applications of these methods to the Park need to be flexible to respond to site specific considerations and resultant developments. Management (including maintenance) issues need to be resolved with a light-handed approach to avoid creating additional problems, and monitored on a continuing basis to evaluate the success of the selected technique. The impacts of the management style on not only the resource, but also on the public and County manpower and equipment, need to be reviewed.

4.4.1 Recreation Resources: The Park's many recreation resources can be divided into the three general categories of trails, day-use areas and special events for ease of discussion of management strategies. The trails management strategies have been discussed in the previous section.

Day Use Areas: The day use areas identified in Section III can be grouped into seven general zones for management and maintenance considerations: Ranch House Complex, Main Meadow, Grant Lake, Environmental Education Area, Camp grounds, Grant Stable and Back-country. General management issues for all the areas include safety and liability, monitoring of recreational uses' impacts, ability to accomplish maintenance operations (especially as the Park becomes increasingly popular); and natural and historic resource protection. Site specific issues include:

Ranch House Complex: impact of group use on facilities; potential conflicts between interpretive activities in Ranch House and groups using cookhouse and courtyard; and restoration accuracy versus public accessibility.

Main Meadow: group sizes, activity type and frequency, and impact on picnic areas and amenities.

Grant Lake: fish stocking and depletion; wildlife and habitat protection; water level and quality control; safety of dams.

Environmental Education Area: wildlife and habitat and other natural resource protection.

Campgrounds: campground reservations, check-in & patrol; group sizes and activities.

Grant Stables: Leasee & County obligations.

Back Country: campsite impacts & monitoring, (trails related issues are discussed in *Section 4.1.5*).

Management options that can be applied to all these areas include:

1) Providing educational programs to inform visitor about management issues and solutions, i.e. fire dangers and safe use of fire in the Park.
2) Temporarily closing highly impacted areas, or restricting the frequency of activities that cause management or maintenance problems, i.e. limiting group sizes or frequency of use of picnic areas.
3) Re-evaluating appropriateness of recreation activities and location, and possibly removing them from the Park.
4) Increasing maintenance and manpower for monitoring activities.

The goal of all management options is to maintain the pastoral character of the park. Any intrusive management techniques that might allow the park to handle increased recreational activities need to be evaluated in light of the visitor's experience. The primary goal should be to balance recreation opportunities with resource protection and enhancement to maintain the existing park character.

Special Events: As discussed in Section 3.7.3, the park is becoming increasingly popular as a location for special events. Each of these events need to be evaluated in light of potential benefits for the park user, and their compatibility with the park goals, other park uses, and the staff ability to monitor the event. The management of special events have their own unique issues including parking and crowd control; clean-up; resource protection; the definition of desirable activities, group size limits, number of events; and safety, liability and emergency services provisions. The bulk of the responsibility for the management of these activities should be placed on the sponsoring group, provided the Park managers have developed a system to delegate that responsibility. This system should include restrictions based on past experience

for each general activity type (e.g. bike races, corporate picnics, endurance rides), and standards for a Special Event Plan that each sponsoring group must submit.

The Special Events Plan is a relatively simple way to begin to record and codify such things as emergency services; anticipated number of people and cars and the approach for dealing with overflow (including limiting access to the event); methods proposed to encourage ridesharing of events use for over 100 people; pedestrian safety; circulation to and from parking area and event; personnel provided by group for traffic direction and control of event size, number of park staff required, and special features, etc. This Special Events plan checklist should have room to record the results of the event once it is over. Any group's request to utilize the park for a special event should go through a simple review process that assesses the type of event; potential impact (or enrichment) on the park resources and visitor experience; reputation of sponsoring group to comply with established policies; and adequacy of prepared special event plan. This process should weigh the request with other events planned for the season as well as any special concerns, such as drought, high fire danger etc. Currently the reservations for special events are handled by the Central Reservations for the Park System. These requests should also be reviewed by the Park Manager and Senior Ranger.

4.4.2. Natural Resources: The following sections outline management strategies for a variety of natural resources. It is inevitable that potential conflicts will arise between resource management strategies such as waterfowl habitat enhancement versus water quality control of adjacent water bodies; or stream erosion versus stock and wildlife access to water. These strategies need to be applied on a case-by-case basis to specific situations to develop the best solution. When implementing any of these strategies it is important to assess its effect on other resources and attempt to mitigate the impacts.

4.4.2.1 Restricted Access Zones: The park has several zones that are restricted from recreation and other potentially detrimental uses. These are sensitive resources and hazardous areas and include: riparian areas, wetlands, geologic hazards, archaeological zones and locations critical to wildlife and endangered species. The first line of protection is to route trails and locate recreation areas away from these restricted zones. The EIR requires mapping of all seeps, springs and other fresh emergent wetlands to assist in final trail and road development and for interpretive purposes. The *Restricted Access Zones* map identifies where these resources are known, but should

Restricted Access Zones

be updated when drought conditions return to normal rainfall. Other site specific recommendations include:

Riparian protection zones: Additional fences should be installed along San Felipe Creek, Arroyo Aguague, Smith Creek & the Pala Seca Valley Creek to ensure that cattle are not permitted in these streams. In addition, cattle should also be fenced out of springs and other sensitive areas identified in the EIR.

Wetlands: Areas that the EIR identifies as meeting the criteria for wetlands would be managed for their biotic values. These include the areas along the Brush Trail, in Hall's Valley, Grant Lake and at the Woodland Youth Camp. Management may include fencing the area, constructing boardwalks with railings and changing maintenance procedures, such as restricting mowing and spraying in these areas. Protection and mitigation measures identified in the EIR would be implemented.

Archaeological areas: Known archaeological sites are not identified in the Master Plan as a protective measure for these sensitive resources. The trails and recreation activities are located away from these resources where possible. Because of the extensive number of known sites through the Park and the high probability of accidental discoveries park staff needs to be especially sensitive to the protection of these resources.

Geologic hazards: Trails should be re-aligned away from critical slide or seismic areas as identified in the EIR. Protection and mitigation measures identified in the EIR would be implemented. These measures include: constructing trails and structures to conform to County grading ordinances for slope stability, geologic hazards, seismic and liquefaction hazards. The County should develop and distribute information about the park and specific precautions taken at each facility site regarding seismic and geologic hazards.

Critical wildlife & endangered species: Protect areas identified in the EIR such as nesting sites, endangered flora areas during their critical seasons including limiting recreation activities and access if required. As all trail alignments are determined they would avoid these areas and allow retreats for birds and other wildlife.

4.2.2.2 Vegetation Management

The plant communities within the boundaries of Grant Ranch County Park are extensive, and well-documented in the 1976 master plan and Program Report (EDAW, Hardesty Assoc.). However, in many areas, existing native plant associations have been disturbed/altered by a long history of cattle grazing.

The two major objectives for vegetation management efforts at Grant Park are:

- To manage vegetation with an emphasis on restoring a natural condition with ongoing minimal disruption to natural processes.

- To restore and perpetuate native plant communities that prevailed prior to Euro-American influence.

The scale of Grant Park, combined with a policy of continued cattle grazing as a fire management technique and historic theme, renders a goal of a totally native plant succession impractical. Vigorous re-vegetation efforts should be undertaken to re-establish and augment native species only in manageably-sized areas. Therefore, the vegetation management program takes a pragmatic approach. It focuses efforts on three broad areas. These are:

- vegetation enhancement and management of the immediate Halls Valley bottomlands;
- selected pilot projects of natural succession outside the valley floor; and
- park-wide efforts to encourage regeneration and protection of native oak species.

With this focus stated, however, it is a goal of this plan that exotic woody species (those plants not originally native to the site) be removed park-wide except as noted below.

The greatest challenge facing the park manager's in their re-vegetation efforts are from the animals that exist and forage on site. Browsing from cattle and deer, rooting by feral pigs, and root disturbance from gophers, ground squirrels, and mice are certain to hinder re-vegetation efforts. Preventing, in an absolute manner, all those animals from doing their damage is impractical, and most likely a futile exercise. However, some measures can be taken to reduce the expected damage. Recommendations include the following:

- "Overplanting" can help to compensate for anticipated losses. Managers should accept the premise that some plants will be lost to animal damage (browse or root disturbance) or environmental factors. Plant a substantially larger number of seeds (acorns or seedlings) than the prescribed number of mature trees so a balance can be achieved that allows for the likely survival of enough seedlings to achieve the desired results over time.
- Fence around limited, specified "re-vegetation areas" until trees reach a height (+/- 54") that allows them to survive even with some browsing by cattle and deer.
- Place protective, wire-mesh cages around newly planted trees, groups of trees, or sprouting acorns. Such cages could be removed when trees reach a "browse-survivable" height as mentioned above.

Vegetation Enhancement Zones: Within the lower portions of Grant Park, five vegetation management zones are identified for enhancement. These are: Grant

Lake; San Felipe Upper Riparian Forest; San Felipe Lower Riparian Forest; Halls Valley Meadow; and the Grant Ranch Complex and Bohnoff house gardens. The following table outlines a selection of native plants suitable for re-vegetation in all areas except the ornamental gardens associated with the Grant Ranch Complex and Bohnoff houses. The table is not all inclusive.

Grant Lake: The lakes edge conditions should be enhanced for fishery, migratory waterfowl habitat, and aesthetic purposes. Specific goals include:

- stabilize, through dam improvements, typical annual water level fluctuations such that the island remains an island. This water level should meet the EIR established minimum island size of 0.25 to 0.5 acres and range of acceptable water levels necessary maintain the island's habitat values.
- install a cross-sectional plant progression from aquatic to upland associations
- on the north, west, and south shorelines provide a diverse plant mosaic within a 100' zone from either side of the water's edge. This mosaic should be composed of approximately:
  - 30% open water
  - 10% aquatic association
  - 15% freshwater marsh association
  - 15% riparian thicket association
  - 30% wetland meadow association
- establish on the east side of the lake a 50% cover of riparian trees.

Riparian Forests: Santa Clara County General Plan defines a 150' setback for all *development* from the top of stream banks. This differs from a *riparian enhancement* zone around a stream that may be established for wildlife passage and habitat. Tworiparian enhancement zones are defined for Grant Park. All exotic plants should be removed from within these zones.

San Felipe Upper Riparian Forest: extending from the Dairy Field to the Grant Ranch House Complex, a riparian enhancement zone should be established. Upstream (above the Bohnoff house), the zone should be 50' wide expanding to 100' wide downstream from the entrance road. All exotic plants should be removed from within this corridor. A native planting program, conducted as an active environmental education / stewardship program should be enacted. Erosion control techniques should be enacted along with revegetation to prevent creek bank erosion.

Vegetation Enhancement Zones

Scientific Name	Common Name	Grant Lake	San Felipe Upper Riparian	San Felipe Lower Riparian	Meadow Low lands	Uplands Live Oak Woodland	Uplands Blue Oak Woodland
Trees:							
Aesculus californica	California Buckeye		x	x		x	x
Arbutus menziesii	Pacific Madrone				x	x	
Juglans hindsii	California Black Walnut		x	x			
Platanus racemosa	Western Sycamore			x			
Pinus sabiniana	Foothill Pine						x
Populus fremontii	Fremont Cottonwood		x	x			
Quercus agrifolia	Coast Live Oak			x		x	
Quercus douglasii	Blue Oak						x
Quercus kelloggii	California Black Oak				x		x
Quercus lobata	Valley Oak			x	x		x
Quercus wislizenii	Interior Live Oak						x
Umbellularia californica	California Bay		x	x		x	
Shrubs:							
Artemisia californica	California Sagebrush					x	
Artostaphylos spp.	Manzanita				x		x
Ceanothus spp.	Wild Lilac						x
Cercis occidenalis	Western Redbud	x		x			x
Garrya fremontii	Fremont Silktassel	x	x	x		x	
Heteromeles arbutifolia	Toyon	x					x
Prunus icifolia	Holly-leaf Cherry					x	x
Rhamnus californica Rhamnus crocea	California Coffeeberry			x		x	x
Ribes spp.	Buckthorn	x	x	x			
Rubus vitifolius	Current & Gooseberry	x	x	x			
Salix spp.	California Blackberry	x	x	x			
Sambucus caerulea	Willow		x	x			
Symphoricarpos alba	Blue Elderberry		x				
	Snowberry						
Ground Covers:							
Arctostaphylos uva-ursi	Bearberry		x	x		x	x
Baccharis pilularis	Dwarf Coyote Brush			x		x	x
Eriogonum vimineum	Wicker Eriogonum		x			x	x
Lonicera hispidula vacillans	Hairy Honeysuckle		x	x		x	x
Penstemon heterophyllos purdyi	Blue Bedder Penstemon		x	x		x	x
Rhus trilobata	Squawbush		x	x		x	x
Salvia sonomensis	Sonoma Sage		x	x		x	
Satureja douglasii	Yerba Buena		x	x	x		
Zauschneria californica	California Fuchsia					x	x
Grasses / wildflowers:							
Delphinium hansenii	no common name						x
Gilia capitata	Blue Thimble Flower				x	x	
Linmanthes sp.	Meadow-foam	x			x		
Lupinus spp.	Lupine				x	x	x
Nemophila mensiesii	Baby Blue Eyes						x
Orthocarpus densiflorus	Owl's Clover				x	x	x
Stipa pulchra	Purple Needlegrass	x				x	x
Aquatic and Freshwater Marsh:							
Heleocharis acicularis	Needle Spike-Rush	x					
Polygonum punctatum	Water Smartweed	x		x			
Rumex crispus	Curly Dock	x		x			
Scripus robustus	California Bulrush	x					
Typhia Latifolia	Soft Flag Cat-Tail	x		x			

* The above plants are not all inclusive but represent plants that should be emphasized in revegetation efforts.

Suitable Plants for Revegetation*

San Felipe Lower Riparian Forest: extending from the Grant Ranch house complex to the Canada del Pala trail crossing, a riparian enhancement zone should be established. The zone should be 100' wide (from stream centerline) from the house downstream to just below the polo field and then expanded to 200' (from stream centerline) to the Canada de Pala Trail crossing. It should incorporate the whole access nature interpretation trail.

Valley Meadows: The meadows of Alfalfa, Valley, Stockyard, Barn, Middle Snell, and Lower Snell Fields present a significant opportunity for native grass and wildflower establishment. Cattle grazing should be excluded from these fields.

Star Thistle Management: Select portions of the Barn, Middle and Lower Snell Fields should be temporarily fenced off and used as a pilot project for the management of Star Thistle (*Centaurea solstitialis*). Techniques that should be evaluated over a minimum three year program include:

- repeated, controlled burning; and
- intensive cattle grazing during the period immediately prior to the thistle going to seed.

If the Star Thistle Management program is successful, these areas should be re-established with native bunch grasses (by seed or tube seedlings).

Native Bunch Grass Establishment Program: Parts of Halls Valley were once vegetated with native perennial bunch grass species. Today, these native grasses remain in minor, but thriving stands in the park. One such area lies near where the Canada de Pala Trail crosses San Felipe Creek. This area should be surveyed to identify an expanded "succession" area. The entire zone should be fenced from pigs and cattle with non-native grasses manually removed to evaluate the potential for native bunch grass to expand and re-establish without additional manual plantings.

Field Crops: Raising field crops has numerous program benefits. These include actively demonstrating for environmental education values one aspect of ranch history, providing feed for cattle, and providing, depending on the crop raised, feed for migratory waterfowl. Because of its visibility to the ranch house and proximity to Grant Lake, approximately 15 acres of the Alfalfa Field should be seasonally planted in historically appropriate grain

crops. These crops should not be irrigated, but rather demonstrate dry farming techniques.

Grant Ranch and Bohnoff House Gardens: Irrigated ornamental plants, particularly unusual or heritage species, should be incorporated into the landscape themes for the two houses. The long-term goal is that these areas would be the only areas within the park where non-native species would be planted. This goal reinforces the natural plant communities throughout the park.

Natural Succession Pilot Project: The landscape surrounding the site of the Pala Seca Camp is diverse. It includes a natural vernal pool area (sag pond), springs, and wet meadows in an Oak Savannah setting. This landscape provides an ideal opportunity for observing both woody and herbaceous native plant succession. It is recommended that the camp area would be fenced from cattle. This fencing should be a high priority item, preceding the establishment of the camp by at least three years so that natural processes can be evaluated without intrusion by cattle or man.

Oak Regeneration: Oaks are extensive throughout Grant Park. The most heavily represented species are Coast Live Oak (*Quercus agrifolia*), Valley Oak (*Quercus lobata*), Blue Oak (*Quercus douglasii*), and Black Oak (*Quercus kelloggii.*). Re-vegetation efforts should concentrate on the Black Oak and Valley Oaks as these are not regenerating well. The Coast Live Oak and Blue Oak that grow on steep hillsides seem to be regenerating well, as cattle seem less likely inclined to graze in these locations.

For both Black Oak and Valley Oaks annual surveys should be made to identify and protect naturally recurring seedlings from animal damage. New plantings of Black Oaks should be concentrated on east facing slopes along the west boundary of the park's upper ridges. Plant numerous Valley Oak seedlings throughout the park because their acorns offer high food value to many forms of wildlife.

4.4.2.3. Fire Management Program: Fire management affects not only the safety of park visitors, staff, and residents, but also the Park's natural and cultural resources, and facilities. Even the best management program can not totally eliminate the threat of destructive wildfires; however, proper management can lessen the severity of these events. The following program outlines the major causes of fire, assesses the Park's relative risk, summarizes existing suppression and management techniques and proposes potential fuel modification options.

Major Causes of Fire: There are two major sources of fire: natural causes, and human related activities. Natural causes such as lightning, while not a frequent occurrence in the Bay area, are a threat due to the limited annual rainfall and the biotic community that builds up dry fuel. Humans are by far the most prevalent cause of wildfires; with the most state-wide documented cause being the sparks of motor vehicles and other combustible engines which have catalytic converters. There are also a number of accidental recreation related origins such as campfires and cigarettes, and of course premeditated arson and vandalism.

Risk Assessment: Risk assessment should be updated seasonally (or more frequently if required) to identify the probability and severity of potential fires, the proximity of these hazards to sensitive resources and the relative level of threat to life and property. The Park's biotic communities present several levels of potential hazards based on plant type and density, topography and solar exposure. In addition, there are distinct seasonal variations from year to year in rainfall, plant growth, wind patterns and other conditions that vary the level of potential fire danger. In general, the chaparral community presents the highest level of threat, especially where the community is overburdened with thickets of old growth and dead wood. The grasslands present the second level of threat. The exotic annual grasses, that are especially productive in grazed areas are highly flammable once they dry out. The Oak Woodland and Riparian Woodland are at the lowest level depending upon the general density, amount of understory, and old growth. The woodlands that include contiguous stands of Foothill Pine *(Pinus patula)* create a higher fire potential due to the flammability of this species. The structures throughout the park are also prone to wildfire; the unoccupied structures and ruins being at higher risk. Recreation activities, such as camping and picnicking that involve campfires or barbecues, and staging/parking lots also create high hazards to the Park. Special events, where large numbers of automobiles park off the paved surfaces and where the user activities and crowds are more difficult to manage, need to be given special consideration. To a

lesser extent the use of the back-country for trail related activities and fishing present some hazard since they introduce humans to areas that receive less extensive maintenance and are more difficult to monitor.

The relative risk assessment based on natural climatic factors, flammability of the biotic community and recreation use must be weighed against their proximity to critical and sensitive resources. Human gathering areas and residential areas need to receive top priority in management to reduce exposure to fire. Other sensitive areas include locations of hazardous materials storage, critical wildlife and natural resource zones that are sensitive during periods of high fire hazard, and historic structures and other facilities.

Current Fire Policies: Fire is a natural process within the ecosystems included in the Park. Most of the park plant species are able to regenerate after a fire, and some actually depend upon fire for its cleansing and renewing effect. The wildlife value of the chaparral community is actually enriched for the first two to three years after a burn when the new growth is rich in nutrients.[1]

Current County policies focus on prevention and suppression of wildfires. The County acts according to standards set by the Central Fire District (CFD) of the California Department of Forestry (CDF) and depends upon them to actually suppress fires within the park. Once a fire starts in the park, the Rangers notify the CFD of the location and size of fire, type of combustible materials, direction of spread, and presence of structures. The rangers primarily provide evacuation and back-up assistance. The CDF maintains a Pre-suppression Plan for the Park that outlines a fire fighting strategy for each area within the park and expected manpower/equipment requirements. The Incident Commander makes adjustments to these plans on-site. Their fire suppression approach is one of being "light on the land" to minimize the potential negative impacts of the fire fighting activities. The better the prevention and fire management program, the less likely the occurrence of a severe fire and the fewer negative impacts associated with the actual fire suppression activities.

The park currently conducts in-house training of safety equipment and emergency procedures. During the fire season each truck is equipped with slip-in pumper rigs to permit rangers to make initial attacks as they notify the CFD. Other management techniques utilized to reduce the severity of fires include the disking and maintenance

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[1] Biswell, Harold H. Prescribed Burning in California Wildlands Vegetation Management. U.C. Press, 1989, pps 168-176

of fire breaks along Mt. Hamilton Road and at the fence line in Alfalfa Field. Maintenance of graded trails 12 feet wide with 16 foot height clearance serve as fire breaks and help compartmentalize any fire within the park. Grazing also helps maintain open grasslands and reduces the build-up of fuel. Hand thinning and removal of dead material is the most labor intensive operation and reserved for areas where other methods can not be utilized.

Education & Prevention Programs: Education and prevention programs need to be an integral part of the management plan. The Supervising Ranger must have the ability to restrict high risk uses of the park seasonally and in such locations as the back country or other sensitive areas during periods of high fire danger. Visitors need to be informed of the hazards of wildfire, steps they can take to prevent them and emergency procedures they should follow in case of a fire. A display board informing the visitor of the fire danger rating needs to prominently displayed at the staging areas and parking lots. Additional information should be disseminated about the fuel modification techniques being utilized in the park and their effect on the resources and fire danger. Such education programs are a relatively cost effective method to reduce the immediate risk of accidental man-made fires and would improve overall relations between park management and park users. However, education does not reduce overall fuel level or ensure that fires that do happen are lower in severity. Education and prevention programs must work hand-in-hand with physical management to modify the fuel level of the Park.

Fuel Modification Options: Building from the Pre-suppression Plan developed by the CDF for the southern portion of the Park, the Park is divided into several management blocks of land. These blocks are primarily bound by existing roads and trails that serve as fire breaks, natural barriers (such as streams or ridgelines) and the Park boundaries. There are two divisions: Division 1 is south and west of Mt. Hamilton and Quimby Roads; Division 2 is north of these roads. There are a total of 21 blocks as shown on the following map. Four potential fuel modification techniques that could be applied to the various blocks in the park are discussed below. The chart following the map summarizes each of the blocks, their character and potential fuel modification techniques.

Animal Grazing: This method includes the intentional use of animals to reduce the amount or density of vegetation and lower potential fire hazard. Cattle are the primary animal currently utilized in the park. The Parkland Range

Fire Management Blocks

KEY

- G Animal Grazing
- M Mechanical Control
- P Planting
- PF Prescribed Fire

RESTRICTED ACCESS ZONES

- Arroyo Aguague
- San Felipe Creek
- Smith Creek
- Springs
- Pala Seca Creek
- Private Road Easement

FIRE MANAGEMENT BLOCKS

Joseph D. Grant County Park

JOSEPH D. GRANT COUNTY PARK

FIRE MANAGEMENT SUMMARY CHART

Fire Management Summary Chart

Area Desig.	Approx. Acreage	Ave. Slope	Vegetation	Structures Inhabited	Structures Historic	Archeo, Sensitive Areas	Concentrated Recreation Area	Access Roads Paved	Access Roads Graded	Potential Mgmt ** Tech
Park Lands South & West of Mount Hamilton & Quimby Roads										
1 - 1	220	17%	Grass, Med. Brush & Oak Woodland	Yes	Yes	Yes	Yes	Yes	Yes	G, M, P, PF
1 - 2	200	10-15%	Grassland (1 or 3)	No	No	Yes	Yes	Yes	Yes	G, M, PF
1 - 3	75	10%	Grassland (1)	Yes	Yes	Yes	Yes	Yes	Yes	M, P
1 - 4	900	22%	Dense Brush & Oak Woodland (2 & 4)	No	No	Yes	No	No	Yes	G, M, PF
1 - 5	150	18%	Grass, Med Brush & Riparian (1 & 4 or 5)	Yes	No	Yes	Yes	No	Yes	G, M, PF
1 - 6	300	17%	Grass, Lt. Brush & Oak Woodland	No	Yes	Yes	Yes	Yes	Yes	G, M, P
1 - 7	600	32%	Grass, Med Brush & Oak Woodland (3 & 4)	No	No	Yes	No	Yes	Yes	G, M
1 - 8	300	10%	Grass & Med Brush (3 & 5)	No	No	Yes	Yes	No	Yes	M, PF
1 - 9	500	35%	Grass & Med Brush (1 or 3 & 4)	No	No	No	No	No	Limited	G, M
1 - 10	300	25%	Grass, Dense Brush, Pine/Oak(1 or 3 &4)	No	No	No	No	No	Limited	G, M
1 - 11	75	17%	Grass, Med-Dense Brush (3 & 4 or 5)	Yes***	No	Yes	No	No	Yes	G, M
1 - 12	250	17%	Grass, Dense Brush, Pine/Oak(1,3 &4 or 5)	No***	No	No	No	No	Yes**	G, M
Park Lands North & East of Mount Hamilton & Quimby Roads										
2 - 1	450	26%	Grass, Lt. Brush & Oak Woodland	Yes	No	No	No	Yes	Yes	G, M
2 - 2	350	22%	Grass, Lt. Brush & Oak Woodland	No***	Yes	Yes	No	Yes	Yes	G, M, P
2 - 3	125	10%	Grass & Oak Woodland	No	No	Yes	Yes	Lmtd	Yes**	M, PF
2 - 4	700	>30%	Grass, & Oak Woodland	No***	No	No	No	No	Limited	G, M
2 - 5	350	23%	Grass & Oak Woodland	No	Yes	No	Yes	No	Yes	G, M
2 - 6	850	28%	Grass, Med. Brush & Oak Woodland	No	No	Yes	No	No	Yes	G, M
2 - 7	650	27%	Grass & Oak Woodland	No	No	No	No	No	Yes	G, M
2 - 8	1100	>30%	Grass & Oak Woodland	No	No	No	No	No	Svr Limits	M?
2 - 9	250	26%	Grass & Oak Woodland	No	No	No	No	Yes	Yes	G, M

NOTE: ** Proposed Trails improve access

*** Contains emergency access road to adjacent properties

Key to Management Techniques (see text for further description): G = Animal Grazing, M = Mechanical Control, P = Planting, PF = Prescribed Fire

Amphion Environmental, Inc. - 6/10/93

Management policy recommended by Range Management Task Force and adopted by the Board of Supervisors (1992) provides specific guidance for implementing and monitoring cattle grazing. (See *Appendix* for copy of "Parkland Range Management Policy" and "Grazing License.") Historically, grazing by wildlife or stock has contributed to the maintenance of the open grasslands and has recently been used in the restoration of Native California grasses.[2] Grazing is relatively effective on certain vegetation and can be cost effective for the Park if the animals are well matched to the targeted plant species and terrain, their grazing closely monitored and the animals removed once the management goal is reached. However, the potential impacts of unmonitored grazing include aggravated erosion, introduction of exotic plant species, damage to sensitive species, degradation of water quality and the nuisance of animal droppings.

The management policy requires that all EIR requirements be met and that an on-going monitoring program includes appropriate assessment of the quality of soil, water, vegetation and wildlife. Each management block or group of blocks that are grazed would be required a Parkland Range Management Site Plan and Cattle Grazing License Checklist prepared for each specific pasture. This plan should be updated quarterly as a condition of the Cattle Grazing License. Visual monitoring and statistical sampling should be completed quarterly by an impartial professional rangeland ecologist, the Licensee and County. The plan should identify the type of animal (cattle, elk, goats or horses); control methods (fencing, tether or rotation); approximate length of time and number of animals on the pasture; and special procedures such as seedling protection, and erosion control. The control of the actual grazing is critical. Test areas should be established when new procedures or animals are introduced. Manpower needs to be dedicated to monitor the entire operation and assess the success or damage of the grazing. Control techniques such as rotating the animals or removing them needs to be pre-planned and put into effect as soon as any damage is visible.

Grazing is a potential fuel modification technique that can be utilized throughout the park except on the valley floor where recreation activities are most intense including management areas: 1-3, 1-6, 1-8, 2-3 and 2-8. In

[2] University of California, Davis, Ecology Graduate Group. Restoration of the Native California Grassland: Guidelines for Management.

addition grazing is restricted from the riparian areas in areas 1-9 and 2-2 and from around the Pala Seca camp in area 2-5. The County-wide Grazing Policy and lease/licensing agreement establishes the method for management and review of lands grazed by cattle to ensure that the targeted vegetation is grazed effectively and other damage is minimized.

Mechanical fuel control is the use of mowing, pruning, or other hand, mechanical or chemical removal methods to reduce the amount or density of vegetation and lower the potential fire hazard. While this method is manpower and equipment intensive, it is often the only effective method on certain types of types and can vegetation type or terrain or when the area is close to structures or areas of intense use. The potential environmental impacts of erosion, discing or chemicals must be considered when prescribing the technique for a certain area with the method matched to the topography and targeted material. As with grazing, an analysis needs to be completed that sets forth the goals, vegetation type and amounts targeted for thinning or removal, topography and soil erosive characteristics. Mechanical methods currently utilized include mowing grasses in the Main Meadow, discing fire breaks and thinning/brush removal around structures. The degree of control during the actual operations depends upon the training and monitoring of the operators and appropriateness of the equipment. Inexperienced operators can do extensive damage to both natural and cultural resources without realizing their impacts.

Mechanical fuel control is a labor intensive management method that is often used in conjunction with the other potential management techniques. It is a must as preparation for a Prescribed Fire; where slopes, soils or density restrict other techniques; and in sensitive areas such as Riparian corridors. It also could be utilized in areas of intensive recreation use, to create fire breaks along Mt. Hamilton Road, and to create a safety buffer adjacent to the private in-holding. It can be used in all areas of the park, but cost considerations would tend to reduce its overall effectiveness in areas where other techniques can be utilized with minimum negative impacts. The primary management areas identified for mechanical methods include: 1-3, 1-6, 1-8, 2-3 and 2-8.

Planting for fire safety around structures and high use areas is based on four distinctive vegetative maintenance zones. The typical minimum width of this buffer is 100-150 feet. The first zone is the furthest from the structure or area to be protected and contains vegetation that has been selectively thinned. This mechanical thinning removes the highly flammable species and reduces the overall fuel volume (dead wood etc.) and foliage mass. It retains or adds new materials for slope and soil stabilization. In the meadow areas a program of replanting or encouraging the spread of native perennial bunch grasses would compliment this first zone as these grasses are less flammable than exotic annuals, produce lower fuel volume on an annual basis and stay green longer. The second zone focuses on low volume slow burning plantings. Here the efforts are intensified to reduce the volume of vegetation. Materials are retained or new plants added that are low profile with limited foliage mass. This zone acts to diminish the rate and intensity of fires as well as provide for slope and soil stabilization. Plants should be drought tolerant and be able to survive without supplemental watering once established. The third zone is a fire retardant area which provides for a maximum fire prevention. The best buffer is low in height and suited to stopping a ground fire that could reach this area. This area should be planted with fire retarding plants, and receive a regular program of watering and weed control. The zone closest to structure is usually domesticated plantings. A regular regime should be established to remove highly flammable materials adjacent to or overhanging structures, and thin dead wood or excessive foliage. Plantings located adjacent to buildings should be carefully placed and should consist of species that do not have a high fuel volume or are highly flammable. A regular program of watering and fuel reduction should be followed for the landscaping in this zone.

A program of planting for fire safety around structures and high-use zones is part of the long range plan for the portions of the valley floor that receive intense recreation use and appear domesticated. State law, Public Resource Code number 4291, dictates that there be a fire retardant zone (zones 3 and 4) for a minimum of 30 feet around each publicly owned structure. These areas occur primarily in Management areas: 1-1, 1-3, 1-6 and 2-3.

Prescribed Fire: The fourth fuel modification method, the intentional use of prescribed fire (also known as controlled burns), is perhaps the most controversial. The Park system presently has a policy of not permitting prescribed fires and actively suppresses all fires. Prescribed burns have been used successfully on many of the adjacent lands and by other parks systems. This method is discussed here as a future option should the County policy be changed. The CDF has a program called Vegetation Management Program (VMP) that includes the intentional use of fire to reduce the amount or density of vegetation and lower potential fire hazard. The local Fire Station Battalion Chief has expressed an interest in working with the County to establish prescribed fire as one of the fuel modification methods. Prescribed fire was utilized in the Park in the past. This practice was discontinued due to public concerns over potential escaped fires and air quality.

Prescribed fires would reintroduce fire into the ecosystem as a natural process. A prescribed fire management program can reduce the damage from future wildfires. Prescribed fire is most effective on grasslands and chaparral where it can simulate natural historic fires and where it can be controlled. If a program is set up with the CDF a cost sharing approach could be utilized where the CDF covers all of the liability and up to 90% of the estimated burn cost, plus any amount that exceeds the original estimate. The County's share of the costs can be provided in contributions of labor, equipment (such as the County's trucks), or other agreed upon offsets. The planning for the prescribed fire takes into consideration and reduces potential environmental impacts such as: air quality by working with the local air quality control board to time the burn during favorable meteorological conditions; controlling the timing and heat of fire to protect wildlife; selecting locations to reduce potential erosion; and matching the vegetation type to the time of burn to protect sensitive plant species.

Specific analysis and preparation must occur before a prescribed burn. Working with the CDF, a site specific Burn Plan would be prepared and the goals of the burn established. The Plan would take into accounts the site characteristics and the information it can provide about the fire's likely behavior such as: the heat of fire; length of burn; best ignition and control methods. These all have a direct relationship to the type, age and density of

vegetation, topography, and solar exposure. The type of vegetation targeted for fuel reduction and the effectiveness of the fire, including the potential effect on noxious species or any detrimental effects on desirable species also would be considered. Once a plan is prepared by the CDF, a program EIR check list is distributed to local agencies to review the potential impacts on archaeological resources; fish & game; soil erosion and the native oaks. Once an "all-clear" is received, the local Air Quality Control Board would be contacted to receive their okay on the burn date. The season and time of the burn would be carefully selected based on air quality, weather conditions and wind patterns.

After the environmental review of the Burn Plan site preparation would be required prior to the burn. If grasslands are especially tall they should be cut or briefly grazed to ensure the fire does not just run along the tops of the vegetation. The understory below Oak trees would need to be cleared of all flammable material to ensure their survival. Fire lines would be established to control the burn. The actual burn would be managed by the CDF staff with the ignition method and control techniques customized to the site.

Based on discussion with CDF, there are two types of vegetation zones where prescribed fire can be used successfully: the grassland on the valley floor and chaparral on the western slope. These blocks include Management Areas: 1-1, 1-2, 1-4, 1-5, portions of 1-6, 1-8, and 2-3. In general, these areas are removed from high activity areas, sensitive historic structures and archaeological sites. They are generally contained within existing graded park trails that act as natural fire breaks. Specific prescriptions would be written as a part of a Burn Plan each time fire is actually utilized as a management tool. Each Burn Plan should identify the goal of the prescribed fire and consider the area specific soil, vegetation, archaeological resources, and potential benefits/hazards to fish and game. It would identify the time of burn, air quality concerns, smoke control, burn method, manpower/equipment requirements and control techniques. It is also important that the neighbors and public be educated and notified prior to any prescribed fires.

Cooperative Measures with Adjacent Landowners: In addition to management techniques within the Park's boundaries, the County needs to initiate cooperative

measures with adjacent landowners to create low volume, slow burning fuel breaks (where the level of fuel has been reduced), and fire breaks to minimize the impact of fires on both the adjacent property owners and the Park itself. These measures are especially important along the eastern boundary at Smith Creek where the topography and vegetation type create a high risk area, and at the northern and southern boundaries where political boundaries do not correspond to the natural fire boundaries of ridgelines or other fire breaks.

4.4.2.4. Watershed Management: The Park is in the fortunate position in that it controls all of the uplands within its watershed, and to a great extent controls the water quality within its boundaries. The Park drains into three different larger watersheds: the San Felipe Valley to the south fed by the San Felipe Creek; the Coyote Creek watershed to the north-west fed by Arroyo Aguague by way of Penitencia Creek; and Smith Creek that joins Arroyo Honda and drains north into the Calaveras Reservoir. The primary concerns in the watershed are ground water regeneration, erosion and water quality. The EIR requires the County to develop a storm water run-off management plan including a pollution prevention plan. The amount of impervious paved areas in the park are small and if properly designed should not contribute perceptibly to the run-off or introduce pollutants into the streams or ground waters. Porous surfaces such as gravel and decomposed granite are utilized where lower levels of use permit. The Master Plan identifies trails that should be renovated including recontouring to minimize water concentration and erosion. Cattle should be watered at stock tanks and fenced away from the streams, springs and water bodies. Removal of cattle from these areas should reduce the sedimentation from erosion and improve water quality by eliminating their wastes. Maintenance procedures should be cognizant of the effect of their operations on overall water and land management, and cease those practices that are detrimental. Use of fertilizers and/or pesticides should be restricted; if used the applications should be minimized and confined to the dry season to avoid runoff into streams or other water bodies. All run-off from the maintenance facilities would be collected and treated before being discharged into streams or drainage areas. Animals and manure should be kept out of streams, dry creek beds and drainage areas. Siting, design and construction techniques used for new features within the park should be sensitive to water quality concerns.

Stream corridors play an active role in controlling water and mineral nutrient flows.[3] Bank erosion, the amount of sedimentation, including siltation, and suspended particulate material are minimized and water quality improved by maintaining a healthy riparian vegetation component. The stream management zones should extend beyond the stream banks and floodplains to incorporate associated terrestrial habitats. The surrounding slopes, their soil profiles and vegetative cover are interrelated to all the streams, springs and perennial drainages. The wildlife values of these areas also should be recognized in revegetation decisions. The streams and their associated vegetation provide not only water, food and cover, but also serve as corridors for the movement of wildlife. Watershed management should not just address water related issues, but also consider wildlife and vegetation that are water dependant. The habitat requirements of significant populations of wildlife, including mammals, birds, fish or amphibians, should be incorporated into the watershed management plan.

The Park contains a variety of lakes and ponds of various sizes, but all have been to some degree man-made or modified by humans. The larger of these water bodies have been designated by the Master Plan to be stocked with warm water fish. These are Grant Lake, McCreery Lake, Bass Lake and Eagle Lake. The Program Report based on recommendations from California's Department of Fish and Game recommends several species of fish and stocking ratios that should prove successful. These fish should be planted and managed as self-perpetuating if possible. Specific recommendations from Fish and Game and the registered aquaculturist where the fish are purchased should be followed for the management of these ponds. Management practices regarding edge treatments, water quality and the control of aquatic weeds should respond to specific problems as they arise. Smaller ponds not stocked with fish should be managed for their wildlife and waterfowl habitat potential. The dams associated with each lake or pond should need to be evaluated periodically for their stability and any damage caused by ground squirrels or other factors be repaired as necessary.

In addition, to the ponds, the Park has many seasonal wetlands, seeps and ground-water recharge areas that need special considerations. The wetlands identified in the EIR require specific protection and may require the relocation of trails or other activities. Seasonal seeps or sag ponds may provide the habitat for rare or unusual plant species. Revegetation and other enhancement plans should take into account

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[3]Forman, Richard T. & Michel Godron. Landscape Ecology. New York: John Wiley & Sons, 1986. Pg. 146-155.

the role these areas play in increasing site percolation rates and ground water recharge. The design and location of potential detrimental features, such as leach fields or chemical toilets, need to consider surface drainage and ground-water recharge and ensure that any impacts are mitigated. All new septic systems should be designed to meet the requirements of the Santa Clara County Department of Public Health and the Region Water Quality Control Board.

4.4.2.5. Pest Control Options: The Feral Pigs and Ground Squirrels within the Park have become so pervasive and have such destructive habits that they are generally considered pests. While their numbers vary annually, specific management options must be made available to the resource manager to control these species.

Feral Pigs: Feral pigs were introduced into California in 1925. Originally they were released in the Carmel Valley of Monterey County for sport hunting. Since that time they have interbred with domestic pigs resulting in the now established population. In Grant Park these animals create problems in recreational areas by destroying vegetation, increasing erosion, intimidating hikers and campers, and overturning garbage cans and tables in picnic areas. Over the years there has been a dramatic increase in the population of pigs in Santa Clara County. The size of the local population varies greatly from year to year depending on rainfall, habitat and food sources. The pigs can reach several hundred pounds and have no predators in the Park (other than man). They are most active in the morning and late afternoon and may travel two to seven miles from their primary habitat. The sow has an average of two litters per year with four to six pigs per litter. Most of the damage to the park is caused by the pigs turning over the soil with their snouts to feed on roots, earthworms, insects larvae, green grasses, acorns and other bulbs or corms. Their rootings are increased in high public use areas by irrigating at night or early morning that make the soil easier to work. Native plants which require less water seem to be less palatable to the animals.

The Park has taken several protective measures to decrease the damage caused by the pigs including: installation of hog-proof fencing around the Ranch House; securing garbage cans and providing food lockers at each campsite. In addition, Rangers advise visitors not to feed any animals including deer or squirrels since feeding would also attract wild pigs. They also warn campers that pigs can get into ice chests and other storage areas and often roam the campgrounds and adjacent fields at night.

The EIR identifies that a specific management plan for Feral Pig control must be formalized and should include options for their eradication or at least to control a maximum population. The Park needs to instigate a program that monitors both the pig population and their effect on the ecosystem and archaeological resource. The possibilities for a cooperative effort with local Universities or agricultural extension should be explored. One of the primary aims of this monitoring program should be to prevent the pigs from damaging the Park's resources. This plan also needs to have a component that includes public education. This education program should identify these non-native pigs as a potentially serious problem. It should that they were introduced by man and that due to the lack of natural predators are not a part of the ecological balance. It should clarify adverse effects on native ecosystems including uprooting vegetation in sensitive areas, soil disturbance and erosion, fouling of springs and streams and destruction of native wildlife, as well as the effects on recreation opportunities. The program should identify the control methods and the reasons certain methods are utilized.

Control options can be categorized into two approaches; protection of the resources from the pigs; or removal of the pigs from the resources. To date, fencing has proven successful to keep the pigs out of small sensitive areas. A welded wire 14 gauge fence with redwood posts worked well. The obvious limits to this method are cost and visual effects of the fence. Restricting irrigation can reduce the attractiveness of high public use areas to pigs. But to effectively control the numbers of the animals, some type of removal process must be instigated.

Two options are most viable for removal: Live trapping or professional hunting. To live trap the Park needs to obtain a depredation permit from State Fish and Game and hire a professional trapper. The trapper would trap, remove and kill the animal and satisfy all requirements mandated by Cal State Fish and Game Regulations including donating pig meat to a charitable non-profit organization. Professional hunting requires the same type of depredation permit as above in addition to a hunting license. The hunting season is open year round with bag limit and possession of one pig per day. However, professional hunting is in direct conflict with existing County Policy that restricts firearm discharge within the park (Santa Clara County Ordinance B14-16). There currently is legislation in the State Assembly (AB 819) that will limit liability and identify pig depredation and management zones. The future of the practicality of professional hunting as a management option is dependent upon the state lawmakers. Either eradication method depends upon a change in current County Park Policy.

Ground Squirrels: Like the feral pigs, ground squirrels in unusually high densities present several problems within the park, including: habitat degradation, structural damage and potential disease outbreaks (such as sylvatic plague among deer and cattle). Management of the squirrels should include a program that monitors both the population and their effect on the ecosystem. The best method for restricting this species appears to be an integrated approach of habitat modification and direct animal control. An on-going program needs to also evaluate the effectiveness of these methods.

Reproduction potential is so great in the squirrels that as long as a preferred habitat exists ground squirrels will reoccupy same space and return to former numbers in a short period regardless of the control method. Ground squirrels thrive where natural habitat conditions have been modified resulting in removal or substantial reduction of the native ground cover. The critical step is to break the predator-watch system by restoring natural habitat through revegetation of the denuded ground. The existing burrows system needs to be destroyed and predation encouraged.

The monitoring program also needs to establish a management threshold of unacceptable ground squirrel damage and population. Once this threshold is reached steps to implement a control method need to be enacted. These methods include poisoning, live trapping and licensed professional hunting. The Park system has a policy of using alternatives to rodenticides whenever possible. The potential impacts of selected poisons on the Park's water quality, and other wildlife such as raptors, or vegetation communities must be evaluated prior to application of that method.

4.4.3. Cultural Resources Management

The nonrenewable resources that are usually categorized as cultural resources are continually subject to natural and human impacts and need a management program that recognizes their values. Often critical decisions encompassing these resources are made by those with little education, training or experience in the preservation of historic or archaeological resources without fully realizing the far reaching affects. These decisions range from policies established by the members of the Board of Supervisors to choices made by an individual maintenance operator. The management plan needs to be sensitive to the Park's significant resources, identify the significant components and address both policy to highly technical materials and methods. The information in the plan needs to be regularly updated and accessible and easily understood by Park staff.

Archaeological Resources: The Park is rich in archeological resources that are sensitive in nature and need special protection. There are many known Ohlone Indian related sites within the park and every construction project that involves earthwork has the potential of exposing artifacts from chert flakes to mortar and pestles, or disturbing human remains. Because of the pervasiveness of the resource the County needs to educate the Park staff of the value and fragility of the resource and their ability to accidentally expose artifacts during routine maintenance operations. Policies must be established to ensure an archaeologist is on site for any construction or demolition within the park. All new development including grading trails, expanding the maintenance yard, improving the stable areas, and developing new picnic areas, staging areas and campgrounds have the potential to impact the archaeological resources.

Since 1976 the Park has been acquiring information regarding their archaeological resources. The site locations and related information must be kept confidential to protect these nonrenewable resources from vandalism and artifact hunting. A policy should be formalized that sets forth the goal of leaving archeological finds publicly unacknowledged and "in-situ" unless the resources are available to protect and properly excavate the site maintaining its scientific, aesthetic , religious and cultural values. It is important that the sites be monitored to ensure their stability including the prevention of damage from erosion or animals (such as burrowing squirrels, gophers or feral pigs).

Management of these resources includes a formalized procedure for dealing with accidental finds. A collaborative process needs to be established that includes the living tribe members should any of their ancestral villages or cemeteries be discovered. All construction contracts that are let for Park development or maintenance must include clauses that require the contractor to stop work within 100 feet of any accidental find and notify the Ranger. It is important to include clauses that ensure the contractor would not be penalized by the County for this cessation of work in either time or money to provide incentive for the Contractor to follow the contract. It is important that when an archaeologist is not actually required to be on site, a County representative sensitive to resource protection review the work as it progresses through the critical stages.

Once an accidental find is discovered, the current California law requires that the County must obtain a qualified archaeologist to determine if the finds are important

resources or if human remains are present. A Federal Law expands the protection of cultural resources. Currently, if human remains are discovered, California State law requires that specific procedures be followed:[4]. The Santa Clara County Ordinance Code Relating to Indian Burial Grounds is tied to that state law. This ordinance (see Appendix for complete ordinance) requires that the following actions be taken:

- Stop all work immediately
- Notify the County Coroner to determine if the remains are Native American
- If the remains are Native American, the county Coordinator of Indian Affairs shall contact the State of California Native American Heritage Commission to notify the most likely descendent.
- Designated members of the Costanoan/Ohlone Indian families, including the most likely descendant representative, shall determine whether the remains are to be left in place or removed and reburied. (The tribal families shall be responsible for designating two people to serve as the County contacts.)

In addition, Section B6-21 of the Ordinance states that reporting requirements shall appear on all public project plans and on all building, grading, encroachment and access permits issued by the County of Santa Clara.

This Federal law should provide guidelines to the State for expanding responsibilties and powers of recognized tribal groups. It is recommended that the County foster a cooperative partnership between interested local tribal members, the County Coroner and Native American Heritage Commission.

The Park's interpretive program needs to take into consideration contemporary tribal revitalization, as well as the sensitivity of archaeological resources in the design of public education activities about archaeology and the Ohlone Indian culture. The use of locations similar to Ohlone village sites can provide enriched programs about the ancestors who occupied the valley. Focusing on the reconstruction of small artifacts; identifications of indigenous plants or rock; food processing or building techniques that were utilized by the Ohlone Indians can provide a well rounded experience for the visitor without endangering any archaeological sites.

Historic Structures and the Rural Historic Landscape

The "best" preservation of the Park's historic resources requires the development of a full understanding of the resources' values and the rate of change or deterioration. Most of the historic structures are recognize by Park management and County

[4] Native American Heritage Commission. "A Professional Guide for the Preservation and Protection of Native American Remains and Associated Grave Goods." February 1988.

Historic Structures

1 Historic Structures
- Ranch House
- Tank House
- Cookhouse
- Buddy Residence
- Carriage House
- "Rat Proof Shed"

2 Green Barn

3 Grant Stable Complex
- Bunk House
- Ranch Hands Cookhouse
- Ranch Managers House
- Wagon Shed
- Blacksmith Shop
- Pole Barn
- Joquine Marietta Barn

4 Snell Barn

5 Washburn Barn

Landscape Features

A	Water Tanks at Ranch House
B	Green Corral
C	Grant Lake
D	Canal Remnants
E	McCreery Lake
F	Base Lake
G	Water Tank near Bush Camp

Features Not Identified on Map
- Ranch Roads
- Fence Lines
- Line Shack
- Snell Homesite
- Circle Corral

CULTURAL RESOURCES

Joseph D. Grant County Park

Heritage Commission as being of value. However, the full extent of the potential resources are often not readily realized. The historic resources of Grant Park are not the work of a well known professional designer, nor did they develop as prototypes of design theories or philosophies. The structures are not associated with any great American historical event or personage. However, much of the landscape visible today reflects the continuum of people who occupied the land and "possesses a significant concentration, linkage and continuity of areas of land use, vegetation, buildings and structures, roads and water ways, and natural features" to quote the definition of latest National Register of Historic Places category "Rural Historic Landscapes.[5]" The value of the cultural resources within the Park are more than the sum of the individual pieces and must to be managed as such.

The management of the resources encompassed in the Rural Historic Landscape needs to include a process of identification and evaluation, and to establish management options, maintenance guidelines and interpretative program opportunities that protect the resources.

Resource Identification: Most of the Park's historic structures have been preliminarily identified as being of historic value. To properly manage these buildings the identifying features need to be recorded, as well as the relation to the surrounding buildings and landscape documented. The same type of identification needs to occur for the salient features of the landscape that describe the processes instrumental in shaping the land and its physical components. These include: visible remnants of land uses and activities, patterns of spatial organization(s), representation of human response to the natural environment and cultural traditions, historic circulation networks and boundary demarcations, vegetation patterns related to land use or practices; buildings structures and objects and their associated clusters or placement; archaeology sites and small scale elements. Many of these are identified throughout the Master Plan report; however systematic researching, recording and mapping of this tangible historical evidence needs to be completed.

Evaluation: Once the characteristics of both the buildings and landscape are documented, an evaluation should be made regarding the significance of the resources to establish the appropriate application of management options. The evaluation should have three components: a definition of significance based on the

[5]National Register Bulletin #30. Guidelines for Evaluating and Documenting Rural Historic Landscapes, pg. 2.

historic context; an assessment of the historical integrity; and the establishment of management zones or boundaries. A historic context should be established during the identification phase and related to an important historical theme, area of significance, or period. For Grant Park a readily definable theme is the development of the California cattle ranch from pre-history to present day. Several other themes may be proposed and discarded during additional research on the Park's history.

Defining Significance: The National Register has established criteria to qualify the significance of a property based at least one of four aspects:

A. association with events that have made a significant contribution to the broad patterns of history.
B. association with the lives of significant persons
C. embody distinctive characteristics of a type, period or method of construction
D. yield or are likely to yield information important in prehistory or history.

Other criteria are also evaluated including: age, integrity of location and materials, area of significance (such as agriculture or archaeology) and period of significance (such as prehistory to 1941).

Assessing Historic Integrity: The integrity of a historic resource is defined by the National Register as being the composite effect of seven qualities: the sense of time and place, location, design, setting, materials, workmanship, feeling and association. The landscape's period of significance establishes the benchmark for determining if change contributes to its historic evolution or alters its historic integrity. Some characteristics or elements would undoubtedly be more critical to the sense of integrity than others depending upon the theme of the site's history. Integrity also includes the identification of future changes and the threat to critical elements. Contributing and non-contributing resources should be classified during the assessment of integrity. These classifications are based on the elements' integrity and association with the site's established significance. The final weighing of the overall integrity is based on the overall condition of the elements and their ability to convey significance.

Establishing Management Zones and Boundaries: The management zones must encompass the area of historic significance that directly contribute to the character of the historic landscape, rather than just resources with scenic or wildlife values. All of the acreage of the Park should be reviewed for its significance. Continuity of historic characteristics are essential; many historic properties do not retain their historic property line or possess

significant characteristics throughout. Peripheral areas with non-historic features should be excluded. Appropriate edges can include historic fence lines, ridgelines, stream bodies or current legal boundaries.

Management Options: The preservation community generally recognizes seven treatments for managing cultural resources: anti-preservation, conservation, preservation, rehabilitation, adaptive rehabilitation, restoration and reconstruction. These techniques vary greatly in their approach toward managing change and the degree of appropriate intervention. Several appear to have a role in management of the historic resources of Grant Park. The identified option applications are preliminary and should continue to be developed as the management plan is implemented in the park based on further research, identification and evaluation of the historic resources.

Anti-preservation takes the approach that history is continual and that any management program is changing the course of history and thereby lessening the site's historic value. As a management policy it is most successful if there are no particularly valued elements or qualities in the landscape. It leaves the continued presence of historic resources entirely to chance and the whims of present or future generation. This method does not seem appropriate for Grant Park given the Master Plan goals of resource protection.

Conservation is basically a stewardship of a site involving the intrusion of man only to protect significant resources from total loss or infringement by incongruent uses. There may be resources within the park that warrant conservation as the primary method of management. Potentially these could include much of the Park's back county encompassing the abandoned fence-lines, the canals, ponds, historic vegetation patterns, ruins such as the Snell homestead and Line Shack, and other elements whose contribution can be retained through minimal intrusion.

Preservation is the process of stabilizing, rebuilding and maintaining the existing condition of the resource. Critical to this management option is the need to be able to determine when and what kind of intervention is needed to maintain the resource in an acceptable state. All interventions are minimum timely actions with an emphasis on stabilization and the maintenance of systems that are "working." This seems to be the minimum management level that should be utilized throughout the valley floor where the highest

concentration of significant resources can be found. Given their current condition, such elements as the landscapes and structures around the Green Barn, Snell Barn, and Washburn Barn merit this approach.

Rehabilitation: returns the historic resource to useful conditions; generally bringing it to a state of repair and possibly including some adaptation. While the degree of accuracy is secondary to the goal of continued use; the contributing elements that determine its historic character are given consideration. Throughout the valley floor there are areas and elements that would benefit from this management technique. These include the Green corral, Circle corral, windmills and historic stock tanks.

Adaptive Rehabilitation or adaptive use is the basic retention of the original form or significant features with the integration to accommodate new uses, needs and contemporary conditions. Existing elements or features that do not contribute are removed. The areas mostly likely to be managed using this principle are Grant Stables and the Ranch House Complex . Many of the buildings within the stables complex have already been modified, but still retain some sense of its history. This technique allows for additional necessary modifications to permit the leasee to run a safe operation, but takes into consideration the salient features such as the buildings relationships to corrals, pastures, roadways, vegetation etc., as well as past historic uses. The proposed adaptive uses of the Ranch House Complex also fall under this management category. Given the compatibility of the proposed and historic uses, the standards for rehabilitation of the Ranch House Complex structures could be a little more stringent in their historic accuracy. The uses proposed by the Master Plan should result in a minimal of alteration to the historic fabric. The proposed uses should also be able to minimize short term and long range damage from visitors, retaining the resources' distinguishing qualities and characteristics.

Restoration connotes the return of a site or structure to its original appearance during a selected period. This is the management option most people think of when they think of historic preservation. It removes all intrusive and incongruent elements and requires strict adherence to accuracy of detail. Restoration does not seem suitable for Grant Park. If the significance of the Ranch House complex was identified as warranting the expense and

manpower required for such a project, the Master Plan's proposed activities of the buildings would need to be abandoned to support the restoration goals.

Reconstruction applies to the reproduction of a complete structure and its associated landscape setting which may or may not be original to the site. This technique does not seem desirable for Grant Park. One of the dangers in reconstruction is the creation of a place that is better than it ever was. Reconstruction often snowballs until the authentic remnants in the landscape are no longer discernible from the "make-believe" elements. While reconstruction may be suitable for a contained setting such as a rose garden it is not recommended as a management option for the Park historic resources as a whole.

Maintenance Standards: Several agencies, such as the National Park Service and Department of Army, have extensive treatment manuals and standards specifically developed for maintaining historic resources. These should be reviewed by the Parks Department and modified to fit the needs of Grant Park. The most important things to include in the development of County historical standards are:

- the regularity and standards for inspections on a predetermined schedule
- establishment of a history of these inspection reports to monitor the change and condition
- maintenance procedures that maximize the retention of original fabric; repairing rather than replacing elements
- a policy documenting existing conditions prior to modification or replacement of original fabric
- maintenance by the least intrusive means possible to prevent damage to structure and materials or accelerated deterioration;

The maintenance of historic resources takes sensitivity and skill. Staff performing or overseeing critical operations must receive adequate training and be provided with the proper equipment and techniques to complete the required tasks. The assignment and completion of maintenance procedures needs to be sensitive to the values of the resource.

Interpretative Opportunities: The interpretive opportunities provided by the historical resources can be used for either remote or on-site programs. These programs need to be developed to be accurate, free of cultural bias, relevant to theme and consistent with preservation guidelines. They should focus on the connections among objects,

Viewshed Management

people, activities and ideas, and explore the cultures that created these patterns. At Grant Park the focus should emphasize the changes and continuity over time.

Viewshed & Visual Quality Management: The Park has many locations in the upland areas that offer superb views of the Santa Clara Valley (when air quality is good) and of the Park itself. The quality and character of these views should be recognized and managed where the lands in question fall within Park boundaries. The Master Plan has designated trail overlook points and roadway turnoffs that should receive first priority in viewshed management. From these locations the pastoral character of the park and any intrusions are readily evident. To a trained eye these intrusions include the existing rigid, formal development in the valley floor, and invasions of star thistle in the lower fields, and to a lesser extent the ranch roads/trails. Many of these intrusions are addressed in the Master Plan design recommendations. Other specific issues include surfacing materials of trails and the level of irrigation. Areas of future park development must consider the potential visual impact of green irrigated areas during the summer season when the existing surrounding grasses are tan. The EIR reviewed the visual considerations and determined the visibility and size of "green" areas, appropriateness of irrigation and other restrictions that should be placed on proposed development. Based on the findings of the EIR, the polo field and field crops should not be irrigated, so that they would visually blend year-round with the overall landscape.

Galaxy views and star gazing preservation guidelines were discussed in the Physical Master Plan *(see Section 3.9.5.3 Utilities)*. Management considerations need to factor in the effect that any additional lighting in the park would have on the astronomy activities within the park and the adjacent Lick Observatory.

4.5 Security and Emergency Procedures:

All of the Park's management policies must factor security, visitor and staff safety and emergency procedures into any decision making process. The most effective security for the park lies in its distance from urban areas and winding roads. As future development continues to move eastward into the surrounding hills and the park becomes more widely known, the policies related to security would undoubtedly need to be increasingly pro-active. The Master Plan includes several elements related to the security of the park including gates at all staging areas that can be closed after sunset, restricted parking along the road, concentration of activity areas, maintenance of trails

for ranger patrol, and protection strategies for natural and cultural resources. The plan also presents the development of a good neighbor buffer where feasible to minimize the potential conflicts for adjacent private property owners. It can be expected that the areas closest to Mt. Hamilton and Quimby Roads, and the major recreation zones would demand the highest security measures. Education of the public of resource values, continued ranger presence and the establishment of a resident ranger are the most cost effective security tools.

Safety concerns of both the visitor and Park staff, and emergency procedures to anticipate potential problems must also be continually updated in the Park management plan as new issues arise. The Master Plan has addressed potential safety issues and emergency procedures related to trail use, fire, seismic and geologic hazards, polo, and special events. The Park conducts in-house safety training, and is in contact with local agencies who provide specific services.

The issue of snow related problems were addressed during the preparation of the Master Plan. The attraction of the snow in the higher elevations and the inexperience of the park visitors who try to hike to the snow often result in the need to mount search parties. It was acknowledged that there is relatively little the park can do to actually stop this activity. The Park rangers continue to man the kiosk would ticket illegally parked vehicles and educate the public about the distances, risks and inform them the park closes at sunset. The County needs to continue to work with the Sheriff's Office, Cal Trans (who actually closes the road) and local land owners to continue to monitor and explore solutions to the problem, such as relocating the point of the road closure or restricting the hours non-residents can access the area.

Section V
Implementation

V. Implementation

5.1 Phasing

The Master Plan represents the long range goals for future development and management of Grant Park to balance resource protection and meet recreation needs. The plan is intended to be implemented incrementally over the next 20 years depending upon the availability of funding, or donations of money, labor or materials for specific projects. It is important that the implementation process be systematic so that new programs and features are balanced with the capacity to oversee the completed projects. The availability of adequate staff and resources for continued monitoring and upkeep should be critically assessed prior to any undertaking.

The development priorities are divided into three phases: First Phase (one to five years), Second Phase (five to ten years) and Third Phase (ten to twenty years). These priorities include not only physical improvements, but also management programs and operations expansion. The current focus is on the first five year phase, with emphasis on key priorities and their associated management, maintenance and operations considerations. The most expensive components of infrastructure are phased-in gradually to allow for planning and fundraising and to respond to the demand for facilities.

5.1.1 Development priorities

On-going Projects: there are several projects currently underway within the park that should be incorporated into the Master Plan. These include:

Dam Stabilization: The County recently lowered the spillway to reduce the water level in the Lake. However, if in the future it becomes desirable to raise the capacity of the Lake, seismic related improvements would need to be made to the dams to meet standards of the California Division of Safety of Dams.

Water Distribution Pipes: The water distribution pipes that serve the camping areas require on-going maintenance and repair.

First Phase (one to five years): This phase focuses on protection and improvements to existing natural, cultural and recreational resources in the park. It recognizes several activities that have traditionally occurred and begins to incorporate them permanently into the Park. This phase also sees the development of several pilot programs including: backcountry camping; fish stocking; revegetation; interpretation and pest control. These pilot programs would lay the groundwork for

future program development or modifications. They should be monitored on a continuing basis to assess their success. The first phase emphasizes identifiable projects that can be managed and maintained by available staff. Within this five year period emphasis is on relocating activities to their locations indicated in the Master Plan. The sequence of this development should minimize disruption of park use. Projects that are co-dependent should be completed at approximately the same time. The specific projects that should be undertaken during this phase include:

Park boundary identification: Locate signs at Park boundaries on Mt. Hamilton and Quimby roads. Place additional signs at property lines where trails approach gates to neighboring properties on the north, west and south borders to indicate limits of the Park and discourage trespass.

Staging areas along Mt. Hamilton Road: As a part of transportation enhancements along State Route 130, develop the graded, unpaved parking lots at Grant Lake, Twin Gates, Smith Creek and Edwards Field staging areas with gates, iron rangers, and signage. Implement the crosswalks, no parking and signage along Mt. Hamilton Road as soon as they can be coordinated with Cal Trans.

Roadways through Main Meadow: Pave the existing two way road on the western side of the Main Meadow to connect Stockman's group parking and camping access road.

Equestrian staging area: Construct the graded decomposed granite staging area for trailers. Inspect Green Corral for potential liability and rehabilitate for equestrian use. Provide individual picnic tables and amenities.

Trail recognition and realignments: Formally recognize the following trails on maps and add to maintenance program for annual grading: Smith Creek, Heron Trail and Lower San Felipe Trail. Realign and improve eroded areas on the following trails: Pala Seca, Los Huecos, Bonhoff, Canada de Pala, Manzanita, lower Wild Turkey and Corral Trails.

Whole access trail first loop: Use available grant funds to realign and upgrade for accessibility the first loop of the Whole Access Trail including: Lower Hotel Trail, Barn Trail, and Lower San Felipe Trail. Develop accessible stream crossings on these trails.

Whole access nature trail: Use available grant funds to develop an interpretive program, begin revegetation of riparian vegetation and trail improvements for the nature trail. Complete the trail in the second phase unless additional funding for the entire project becomes available through grants.

Trails signage: Complete new monuments and field signage for each trail as they are improved.

Bay Area Ridge Trail: Dedicate trails included as a part of the Bay Area Ridge Trail System. Grade and recognize the Heron trail in PG&E right-of-way. Complete off site connections whenever feasible.

Orientation: Provide and maintain an information board at the kiosk and visitor center.

Grant Lake environmental education program & trail: Continue the revegetation program and develop an environmental education trail and interpretive program with volunteers and as grant funds are available.

Green Barn: Stabilize the barn (mostly creek bank improvements) and develop an interpretive program developed around available ranch implements. Expand the riparian re-vegetation program as existing parking is removed and new foot trails are established.

Ranch House Complex: Complete proposed site modifications for accessibility. Complete rehabilitation of the Buddy Residence. Begin building rehabilitation of Cook House and Ranch House as soon as funds are available. Complete inventory, evaluation and apply for historic designation of complex prior to construction as part of design work.

Individual picnic areas: Begin meadow revegetation in conjunction with Oak regeneration and Riparian revegetation programs as grant funds become available. Modify existing group picnic sites in the rose garden/south lawn to individual sites. Add picnic area at Green Corral.

Group picnic areas: Relocate Stockman's group area to help preserve the existing Oak. Develop East Garden as a group site to coincide with the completion of the rehabilitation of the Cook House.

Pilot fish stocking: Begin pilot fish stocking program at Grant Lake.

Campground improvements: Begin revegetation throughout the existing camping area in conjunction with Oak regeneration program. Renovate existing Halls Valley Campground and Snell Campgrounds. Open Snell Campground year round (requires winterizing elements). Remove walk-in sites adjacent to relocated Stockman's Group Picnic Area.

Back country camping pilot program: Begin to prepare sites coordinating with revegetation and natural succession programs.

Astronomy program: Formalize public programs and negotiate with private organizations regarding construction of telescope housing dependent upon availability of private funding. Develop joint use parking at campground.

Polo/multi use field: Develop polo/ multi use field dependent upon availability of private funding.

Grazing operations: Implement and monitor program based on the findings of the Grazing Task Force. Relocate operations (including temporary fences and pens along Mt. Hamilton Road) to Washburn Barn area as soon as possible.

Park residence in Bonhoff House: Complete renovations and provide a park resident.

Interpretive programs: Use available grant funds to begin developing general natural and cultural history of Park and begin development of specific

programs for nature trail, and interpreting management programs. Continue development of interpretation program and displays in the Ranch House.

Infrastructure:

Utilities: Relocate underground gas tank. Rebuild water system to Halls Valley Campground as part of the rehabilitation process. Upon receipt of private funding, provide electricity and water to Halley Hill for Astronomy program use.

Building Improvements.

Equestrian Center: Coordinate Equestrian Center improvements with leasee based on on-going County programs.

Public Safety: Remove the following attractive nuisances: Grant family stable near the Ranch House Complex and miscellaneous structures.

Revegetation: Begin revegetation program at Grant Lake; riparian restoration along nature trail (lower San Felipe); revegetation around the campgrounds, at the San Felipe group area, in the main meadow and future parking lots. Continue to coordinate with the star thistle program for on-going monitoring and control. Begin bunch grass protection and enhancement program including fencing and mechanical removal of detrimental plants. Monitor and coordinate programs with wildlife management / habitat enhancement and pest control management (especially of ground squirrel habitat modification).

Fire management: Continue existing management practices and incorporate new trails into maintenance program. Develop education program including installation and monitoring of fire danger signs. Begin to implement options for fuel modification in areas that are in greatest risk of fire.

Watershed management: Fence streams and springs to protect water quality (ensure adequate water in tanks for wildlife and stock). Stabilize creek banks near Green Barns and other highly eroded areas along San Felipe Creek and Arroyo Aquaque.

Wildlife management: Enhance with habitats through vegetation, fire and watershed programs. Monitor and control pests in conjunction with Vector Control. Add fencing in sensitive and revegetation areas as needed.

Cultural resource management: Adopt protection procedures for archaeological resources. Identify and evaluate existing cultural resources and develop monitoring systems to fine tune the outlined management strategies. apply for nomination of eligible historic structures to local and state registers.

Second Phase (six to ten years): This phase expands the successful pilot programs and undertakes new development and programs to protect and enhance the Park's natural, cultural and recreation resources. The projects identified in both this phase and in the third phase should be implemented as funds become available. All trails and trail amenities should be constructed by the end of this phase. Other improvements should include:

Parking & circulation: Develop and connect the one-way loop on east side of the meadow that serves the Ranch House complex and back to the information kiosk on east side of San Felipe Creek. Remove telescope row. Remove existing road and curbs from the center of the meadow. Remove parking at Green Barn and re-vegetate area in conjunction with San Felipe Riparian revegetation program.

Whole access trail challenge loops: Complete the two challenge loops including: Lower San Felipe, Corral, Lower Hotel and Wild Turkey Trails.

New trails: Completed construction of McCreery Lake, Windmill, Bass Lake, Edward's, Antler Point, Smith Creek Overlook and Manzanita Trails.

Trail amenities: Add rest-stops, bridges, and benches to existing and new trails as shown on the destination map.

Trails signage: Complete the trails and field signage program.

Visitor Center: Complete the visitor center and relocate natural history programs to the new building. Develop displays to compliment the new center.

Individual picnic sites: Develop sites on the eastern shore of Grant Lake. Modify existing group picnic sites in the meadow to individual sites.

Pilot fish stocking: Continue fish stocking program at designated lakes if pilot program was successful.

Fishing: Develop fishing pier in Grant Lake.

Back country camping pilot program: Develop one site in each of two designated areas in Pala Seca and Brush Camps (including chemical toilets).

Infrastructure: Expand maintenance yard as demand increases for more working and storage space. Hook up the second well to the water system as needed.

Building Improvements: Continue proposed modifications to site and Ranch House structures as funds area available. Complete inventory, evaluation and historic designation of complex prior to construction as part of design work.

Management programs: Continue recreation, natural and cultural resource management programs. Expand successful programs in both location and breadth.

Third Phase 11-20 years: This phase reassesses the programs and modifies the Master Plan as needed. It expands the first two phases successful pilot programs. Other improvements include:

Turnouts on Mt. Hamilton: Coordinate with Cal Trans to develop identified turnouts. Develop interpretive program and signs for each location.

Parking & circulation: Develop the parking lots associated with the visitor center, San Felipe group picnic areas.

Picnic areas: Develop the San Felipe Group Picnic Area. Green barn restroom is relocated to east side of creek adjacent to the group picnic area once visitor center restrooms are completed.

Camping: Develop Woodland Campground and Youth Area, amphitheater and parking (for shared use with Halley Hill astronomy program). Infill Halley Hill and Snell Campgrounds with designated "future" campsites if demand warrants.

Infrastructure: Relocated Stockman's and green barn restrooms. Provide additional maintenance yard expansion as required.

Management programs: Continue recreation, natural and cultural resource management programs. Expand successful programs in both location and breadth.

5.1.2. Preliminary Cost estimates: The following cost estimate groups improvements by Phase use designation. It is important to note that these costs are not a result of detailed site design or refined programs. Costs are based on items as determined from a master plan scale. Detail site design and program development are needed to refine these costs. A 20% contingency factor has been included in the total for each phase to account for such refinements. The cost of administration and design, management programs, maintenance, operations, staff and equipment were not a part of these estimates. The following costs are based on 1991 dollars and will need to be adjusted for inflation especially during the second and third phase.

First Phase

Park Access	$16,500
Transportation Enhancements along State Route 130	$28,775
Vehicular Circulation, Staging Areas and Parking	$28,500
Trails	$859,500
Day Use Areas	$451,000
Overnight / Extended Recreation Activities	$167,000
Special Funding	$55,000
Revegetation	$328,189
Facilities Improvements	$28,000
Subtotal Phase 1	$1,945,964
15% Contractor Overhead & Profit	$291,895
20% Contingency	$447,572
Total Phase 1	**$2,685,430**

Second Phase

Vehicular Circulation, Staging Areas & Parking	$167,264
Trails	$397,000
Day Use Areas	
New Visitor Center	$950,000
Activity Areas	$47,500
Revegetation	
Facilities Improvements	$130,000
Subtotal Phase 2	$1,691,764
15% Contractor Overhead & Profit	$253,765
20% Contingency	$389,106
Total Phase 2	**$2,334,634**

Third Phase

Vehicular Circulation, Staging Areas & Parking	$116,300
Day Use Areas	$21,000
Overnight / Extended Recreation Activities	$270,520
Revegetation	
Facilities Improvements	$310,000
Subtotal Phase 3	$717,820
15% Contractor Overhead & Profit	$107,673
20% Contingency	$165,099
Total Phase 3	**$990,592**

TOTAL MASTER PLAN IMPROVEMENTS **$6,010,655**

5.1.3. Revenue generation:

A revenue forecast was prepared as part of the Program Report. The conclusions of this report were that revenue augmentation is possible and potentially at a significant level. Revenue is generated primarily by general entrance and use, group fees and special events. Enhanced campground and group facilities, including a visitor center and interpretive programs, could further enhance the existing attractions and increase annual visitation. Back-country camping and fishing introduce new programs that should have an permit fee associated with the activity.

In-kind sources of revenue should not be discounted. These include special event activities provided by the each group and can account for police & security; clean up; temporary furnishing and barriers; supplemental chemical toilets and trash disposal. The two lease holds (or licenses) for grazing and the Stable concession also generate revenue for the park. A portion of these revenues should be dedicated to monitoring and management of the resources that are potential impacted by these activities.

5.2 Staffing & Equipment Implications:

The existing permanent and seasonal staff assigned to Grant Ranch were documented in the Program Report. With the increase in major facilities and programs proposed by the Master Plan it is clear the five year round staff, three half-time seasonals and one third-time ranger would not be adequate to meet the future management and maintenance demands. Operations and maintenance needs are extremely variable in the park system; often a park's size is a minor factor in determining the size and make up of the staff. The number of programs and features, their diversity, geographic dispersal, and the general quality of resources that attract large numbers of visitors greatly influence the level of staffing. It is helpful for Master Planning purposes to anticipate a rough order of magnitude of staff expansion to assist in long range planning. Based on the existing features and looking at the Master Plan the physical expansions to the Park include: the trails system by 25%, the paved parking areas by 17%, remote staging area / graded parking lots by 36%; the campgrounds by potentially 57%; individual picnic areas by 97%. The Master Plan also adds new activities and programs such as backcountry camping, fishing, interpretive programs, resource management. These increases can be translated to staff increases in the range of two to three times as follows:

Staff	Existing	Future
Senior Ranger	1	1
Ranger - nature & resource specialists	0	2
Full Time Ranger	2	2
Maintenance III	1	1
Maintenance I/II	2	4
Seasonal Ranger (full time equivalent)	.833	2
Park Assistance (full time equivalent)	.5	1.5
Seasonal Maintenance (full time equivalent)	.5	1

Staff increases and adjustments to staff organization, roles and responsibilities are inevitable. These increases should be phased-in incrementally on a five year basis with yearly updates to assess level of effort required as new programs and facilities are phased in. The Master Plan would require not only staff expansions but also a wider range of management and maintenance skills as new interpretive and management programs are implemented. Skills training should be an integral part of program implementation. Other labor was recognized in the Program document of

consisting the Weekend Work Program and special interest group volunteers. The effectiveness of such temporary labor requires greater use of professional staff time for supervision and logistical support to match the group with the task and should not be depended upon to meet management needs.

An equipment inventory and desired equipment was summarized in the Program Report. The new program the Master Plan introduces would place additional requirements for equipment to aid in such things as: the management of fish and lake water quality; interpretive display development; vegetation and fire management, and cultural resource management.

Maintenance and operations must be thoroughly considered in the design of facilities and in the phasing of their development. Primary maintenance considerations raised by additional recreation elements proposed in the master plan include: additional picnic sites and staging areas for general maintenance and litter control; back country sites with environmental sensitivities regarding litter and sanitation; trail maintenance; structure and infra-structure maintenance, including buildings, roads, electrical, water and septic systems; and activities related to the management of vegetation, fire, watershed, wildlife and cultural resources.

5.3 Future Studies and Actions

The development priorities discussed in Section 5.1 begin to identify future studies and actions that are needed to implement the Master Plan. However, they focus on identifiable projects and physical improvements, and only outline the different types of management programs required. In addition to the recommendations of Section 5.1, the future success of the Park's ability to balance recreation use and protect its resources is dependent upon the successful development and implementation of a detailed, systematic management program. This program needs to establish in greater detail the priorities and required actions for protection and enhancement for the wide range of environmental and cultural resources, and the expansion of the Park's recreation facilities and interpretive programs. Many of the decisions that form the basis of the management program require Department policy level action and the dedication of funding, manpower and equipment. Without the support of this level of action, the outlined management section of the Master Plan can never be effectively implemented and appropriately applied to the Park lands.

Design of proposed elements must be accomplished prior to implementation of the Master Plan. The Master Plan establishes the general limits of size or numbers of

people, location and relationship between elements and begins to describe character of important features or program elements. The next levels of design, called Design Development and Final Design, includes detailed topographic surveys and specific site investigations (e.g. geology, hydrology, environmental issues, archaeology), and integrates the Master Plan intent with the physical size and design features of each element. Once design is completed more accurate costs can be estimated and Construction Documents prepared for bidding and actual construction.

During design and construction all Federal, state and local codes would be met. The EIR identified some of the codes and regulations with which the plan elements would need to comply. The Master Plan should be implemented using prudent construction processes and adhere to all applicable requirements. Construction methods, standards and codes would need to be updated over the life of the plan as these regulations change. In addition to the many concerns identified throughout the Master Plan, the following are a few of the critical areas that should be addressed to reduce potential impacts related to construction:

Geological Concerns: During the design stages issues relating to slope stability for both existing and proposed slopes should be resolved. All major roads and facilities should be located to protect them from existing unstable slopes or soils. The grading required during the construction of facilities proposed by the Master Plan should be design to increase slope stability and prevent erosion. A slope maintenance program should be implemented for any steep or potentially unstable slopes to protect park visitors.

Seismic Concerns: Portions of the park are located within the Alquist Priolo Special Study Zone. This zone indicates a high potential for damage due to earthquakes. Proposed construction within these areas would be permitted only following the completion of a study prepared by a California Registered Geologist. Facilities within this zone include: the Ranch House Complex, Snell Barn, Washburn Barn, Grant Lake (including its staging area and environmental zone), bridges and trails on most of the valley floor, McCreery Lake and Bass Lake. Grant Stables and the entry kiosk are located on the edge of the special study zone.

Other concerns related to earthquakes include potential liquefaction, surface faulting, and groundshaking. Since the proposed Master Plan would increase the number of persons visiting the Park, the County should develop a brochure about seismic

hazards at the park, and the specific precautions included during the construction of each visitor facility.

Erosion Control: During construction related to the master plan, specific erosion and sediment control plans should be developed for proposed Master Plan elements, including structures and trails, located in highly erodible soils. These plans should address erosion and subsequent sedimentation of water bodies during construction and include the following concepts:

- To the extent feasible, grading, excavation and other earthwork should be confined to the dry seasons. When this is not feasible, erosion and sediment transport control facilities should be put in place prior to the onset of the first major storms.
- To avoid discharge to natural waterways, sediment should be trapped before leaving the construction site through the use of rip-rap, hay bales, siltation fencing or sediment ponds.
- Areas of surface disturbance should be minimized.
- Disturbed areas should be stabilized through vegetative or mechanical methods; when construction is complete, all disturbed areas should be regraded and revegetated. Topsoil should be stockpiled and used for the revegetation of disturbed areas.
- Refueling should be conducted in a location where spills can be contained.
- Debris and refuse should be removed from the site and disposed of in an approved sanitary landfill.
- Chemical toilets should be provided for the use of construction workers.

Air Quality & Noise: Reduction of the temporary air quality and noise impacts associated with construction of the proposed Master Plan elements should be addressed. All construction contracts should require dust and odor controls to reduce the potential for nuisance due to dust and odors. Construction activities should be limited by contract from 7 AM to 7 PM Monday through Friday. The construction should not be allowed on weekends or Federal holidays. Construction equipment should be required to be muffled or controlled. The Park should enforce existing rules against loud operations of radios, televisions or other instruments, and should monitor unnecessary motorcycle or car activity in the parking lots and on park roads.

Appendix

Exhibit 1

SANTA CLARA COUNTY PARKLAND RANGE MANAGEMENT POLICY

1. The Department of Parks and Recreation is hereby authorized to administer a program of cattle grazing at designated parklands, following Board adopted policy designed to protect, conserve, and enhance the natural resources of the parklands and to promote public recreational opportunities.

2. The primary land use objectives for each given parkland must govern the decision whether and how to best employ a grazing program.

   Land management objectives include the following, in priority order:

   a. Provide visitor access and recreational opportunities.

   b. Provide for the safety of park users.

   c. Protect, conserve, enhance natural plant communities.

   d. Minimize fire hazards to parklands and private property by managing vegetative fuels.

   e. Rehabilitate degraded vegetation and wildlife habitat.

   f. Establish cooperative relationships with adjacent property owners.

3. All grazing by domestic stock on any parklands shall be managed so as to maintain the quality of the soil, water, vegetation, and wildlife. The following specific goals and commitments will guide the program:

   a. Each site shall have a management plan (and/or E.I.R. as required by law) which describes the natural resources present and the specific goals, techniques, and monitoring programs used to preserve and enhance them.

   b. The plan shall provide sufficient detail on management techniques to support their use in accomplishing the stated goals. For example, a grazing plan must provide information and justification for stocking rate, spatial and seasonal patterns of use, and type of livestock.

   c. The appropriate vegetation management technique(s) should be selected after considering a variety of options including: no action, prescribed fire, mowing, integrated pest management, herbicides, and grazing. The Department may opt to provide for any, all, or none of the above in combination in a parkland.

   d. A monitoring program should include appropriate periodic measurements of plant and wildlife species composition, density, and frequency. (Other standards, like residual dry matter and stubble height, are useful operational tools but they do not examine the effects of management on the native vegetation).

   e. Special attention shall be given to the effects of grazing on rare plants and rare plant communities, oak regeneration, riparian and wetland areas, and native perennial grasslands, and threatened or endangered wildlife. Attention should also be given to the relationship between grazing and the spread of weedy exotics such as star thistle.

APPROVED BY THE BOARD OF SUPERVISORS
OF SANTA CLARA COUNTY JUL 21 1992
DONALD M. RAINS, Clerk of the Board
BY _____ Deputy Clerk

f. Seasonal rather than year-around grazing will be encouraged at parklands which experience heavy summer visitor use, so as to minimize use conflict. Seasonal grazing will be employed when year around programs cannot be sustained due to inadequate forage production, low water availability, or other environmental protection needs.

g. Normal weather and public use patterns and resultant forage production will be considered when authorizing grazing in a park. Stocking rates will be reviewed quarterly, adjusted as necessary.

h. A conservative approach will be used to determine parkland cattle stocking rates so as to avoid short-term resource damage or long-term range decline.

> Residual dry matter (RDM) standards are used to determine the amount of each year's vegetative pro-duction that should remain on the ground at the end of the grazing season. This residue or mulch acts as a protective layer over the soil to guard against erosion, encourage nutrient recycling, and promote optimum conditions for plant growth. For Santa Clara County the acceptable RDM levels are:
>
> * Less than 30% slope: leave 600 lbs./acre
> Alert level: 800
> * 30 to 50% slope: leave 800 lbs./acre
> Alert level: 1000
> * Greater than 50% slope: leave 1000 lbs./acre
> Alert level: 1200

These standards generally translate into 4 to 6 inches of standing vegetation at the end of the grazing season. Individual areas may have special circumstances that will require that additional mulch remain. Residue requirements will vary according to the need to promote soil stability, maintain plant productivity, enhance visual and recreational values, or protect wildlife habitat. Staff will be given clear, practical, visual monitoring guidelines which correlate with RDM requirements.

i. Natural resource management and recreation objectives will take precedence over revenue generation in establishing grazing programs.

j. Appropriate fencing will be required to ensure the protection of sensitive natural resource areas such as springs and ponds and riparian habitats. Such fencing may not inhibit wildlife or human access to water.

k. Rare species of plants and animals and their habitat will be identified, inventoried, and protected.

l. Archeological sites will be preserved in undisturbed condition.

m. Existing native plants and animals will be encouraged.

n. Soil erosion will be minimized to prevent soil loss or surface water sedimentation.

o. Agricultural landscapes and improvements will be maintained to good visual standards and not detract from positive visitor experience.

p. The spread of noxious non-native plant species will be minimized.

q. Public access to all park areas will be maintained.

4. License agreements will be formulated and administered with an intent to be non-adversarial and supportive of sound long-term working relationships between the Department of Parks and Recreation and its licensees; the grazing operations must be economically viable to both the Department and Licensee to be effective. Environmental standard and recreational opportunities will not be sacrificed for the benefit of cattle grazing.

5. Existing licensees who have successfully met their contractual obligations will be given the opportunity to renegotiate their new licenses under these program guidelines. If these negotiations are not successful, an open competitive bidding process will be followed to solicit grazing tenants, with minimum bid set by the Department.

6. Revenues derived from grazing licenses must reflect fair market value.

7. The Department of Parks and Recreation will ensure proper and effective management of the grazing program by educating and maintaining expertise on staff and using outside experts as necessary to audit the program and/or provide necessary staff training.

8. Reasonable means will be taken to inform the visiting public about the grazing program in each grazed park: the purposes (i.e., grassland maintenance, fire hazard reduction, protection of native plant species, maintenance of healthy agricultural economy, revenue generation and so on) and about range etiquette (i.e., using gates, climbing fences, reporting dead animals and so on) and general safety guidelines for being around the animals.

9. No cattle, sheep, goats or other domestic animal will be permitted to graze in County parks except by written license as approved by the Board of Supervisors.

10. Most public agencies with grazing programs are currently studying the effects of grazing on wildlife and natural plant communities and reviewing their policies and practices, and the scientific community is conducting intensive research and expanding our knowledge of the interactions between livestock grazing and wildlife and native plant community resources; therefore, grazing policy and practices of Santa Clara County will be reviewed in a public forum at least every four (4) years, beginning in two years from the date when grazing begins under this policy. These policy reviews will be based on a comprehensive Department report which includes: (a) progress toward goals stated in the site management plans; (b) a full exposition of costs and revenues. The Parks and Recreation Commission shall review the Department report and if appropriate recommend modification to the Board of Supervisors.

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COUNTY OF SANTA CLARA
PARKS AND RECREATION DEPARTMENT
CATTLE GRAZING LICENSE

THIS CATTLE GRAZING LICENSE is made and entered into this _____ day of _____, 19_____, by and between the COUNTY OF SANTA CLARA PARKS AND RECREATION DEPARTMENT (COUNTY) and _____(LICENSEE).

SECTION 1. DESCRIPTION OF THE PROPERTY

COUNTY hereby grants permission to LICENSEE for a non-exclusive use for cattle grazing only on that certain unimproved real property (the "Premises") including the use of barns and corrals but excluding all residences, and consisting of approximately _____ acres, located in the County of Santa Clara, State of California, and being further delineated on the attached map which is made a part of this License and incorporated herein by reference (as Exhibit "A") for LICENSEE's use for grazing purposes as hereinafter provided with the exceptions set forth in Exhibit "B - Parkland Range Management Site Plan" and "C - Cattle Grazing License Checklist", attached hereto and incorporated herein by reference. Grazing capacities according to the pasture type, including supplemental feeding areas, are set forth in Exhibit "A".

COUNTY makes no warranties and/or representations to LICENSEE as to the suitability of the Premises for grazing purposes.

LICENSEE's use of the Premises is subject to the primary rights of park and recreation users enjoying the Santa Clara County Park of which the Premises forms a part.

SECTION 2. TERM

The term of this License shall be for four (4) years starting September 1, 19____ and ending August 31, 19_____, unless the date is mutually extended as provided below.

After the end of the third (3rd) year of the term of this License, but no later than January 1 of the fourth (4th) year, LICENSEE shall provide written notice of its intention to seek a License renewal. If LICENSEE provides such written notice to COUNTY, the parties shall immediately begin to negotiate in good faith the terms and conditions under which the License may be renewed. The failure to mutually execute a new License by March 1 of the fourth (4th) year will, as of that date, establish that all LICENSEE's rights and uses of the Premises shall end on August 31, 19_____. LICENSEE must have successfully met their contractual obligations set forth herein to be entitled to negotiate a renewal of the License.

SECTION 3. FEE

As consideration for the right, license, and privilege to use the Premises during the term of this License, LICENSEE agrees to pay to COUNTY, without deduction, abatement, set off, prior notice or demand a fee of $_____ per animal unit per quarter, in advance, with the first payment being due on the date the term of this License commences, and each successive payment due three (3) months thereafter.

If COUNTY does not receive payment within ten (10) days of the due date, a late charge of ten percent (10%) of the amount due, or fifty ($50.00), whichever is greater, shall become due and payable in addition to the amounts due. The parties agree that the late charge is for the purpose of reimbursing COUNTY for administrative costs and expenses associated with the handling and processing of late payments. A failure to pay the fee within ten (10) days of the due date shall constitute a default. Acceptance of any late charges shall not constitute a waiver of LICENSEE's default. Notwithstanding any right or remedy of COUNTY on account of such nonpayment, LICENSEE's obligation to pay the outstanding License fee and late charge shall survive the termination of this License. Fees not paid when due shall bear simple interest from the due date at the rate of one percent (1%) per month due and payable in addition to the amounts due and late charge. Any and all indebtedness, accrued because of such nonpayment of fee, shall become a lien on any and all livestock or other property which LICENSEE may have on the Premises.

An evaluation shall be performed by COUNTY in advance of each quarterly period to set forth the grazing carrying capacity in animal units, and thereby establish a base fee for the next quarter. Should COUNTY require the termination of grazing within a quarter and the LICENSEE is otherwise not in default of the License, LICENSEE shall be entitled to a pro-rata rebate for the time remaining once all stock have been removed.

SECTION 4. LAND MANAGEMENT OBJECTIVES

The premises are hereby licensed to LICENSEE upon the express condition that LICENSEE shall use the Premises solely for the conduct of business in connection with the grazing of cattle owned by LICENSEE, consistent with the Parkland Range Management Policy and subject to the terms and conditions of this License and the land management objectives listed below in order of priority, and consistent with the Parkland Range Management Site Plan attached hereto as Exhibit "B" and incorporated herein by reference as though set forth in full, such Parkland Range Management Site Plan to be fully completed prior to initiating grazing at any level:

(1) Provide visitor access and recreational opportunities

(2) Provide for the safety of park users.

(3) Preserve and enhance natural plant and wildlife communities.

(4) Minimize fire hazards to parklands and private property by managing vegetative fuels.

(5) Rehabilitate vegetation and wildlife habitat degraded as a result of grazing.

(6) Establish cooperative relationships with adjacent property owners.

Further, it is hereby mutually agreed by and between COUNTY and LICENSEE that the provisions of this License shall be interpreted conservatively so as to ensure that natural resource management and recreation objectives take precedence over grazing and revenue generation.

SECTION 5. STANDARDS OF RANGELAND UTILIZATION

LICENSEE hereby agrees that the following conditions and requirements shall constitute proper utilization of COUNTY rangelands:

5.01 Stocking Levels and Animal Unit Equivalents. LICENSEE hereby agrees that this is a License for cattle grazing only. The stocking level shall be assessed in animal units per quarter and shall be the number used in the determination of quarterly base fee. The maximum number of animal units for a single grazing season shall be _____. Animal unit levels shall be determined in accordance with the following table:

Type of Animal	Animal Unit Equivalent
Brood Cow (mature female, two (2) years old and above)	1.00
Brood Cow with Calf at side (not to exceed eight (8) months old)	1.00
Bull (mature male, two (2) years old and above)	1.50
Replacement Cattle (eight (8) to twelve (12) months old)	0.50
Replacement Cattle (one (1) to two (2) years old)	0.75
Horse	1.25

LICENSEE shall report to COUNTY the number of cattle on the Premises, by pasture, in each of the above categories with each quarterly fee payment and grazing license checklist evaluation. The report shall include the number of increases and decreases, including, but not limited to occurrence of births, purchased cattle, shipped cattle and deaths since the previous report and shall include the dates of cattle purchases and shipping. LICENSEE shall remove dead stock within five (5) days of receipt of notification by COUNTY. If a carcass is not in close proximity to recreational activities and bad weather or steep terrain require an environmentally unsound or physically unreasonable effort to remove, LICENSEE may, with the approval of COUNTY, bury the stock. LICENSEE shall immediately report any case of infectious disease to COUNTY and shall, at LICENSEE's sole cost and expense, take all steps required to isolate, control and eliminate any such disease.

LICENSEE shall be permitted to maintain five (5) horses per two hundred (200) head of cattle, two (2) of which must be corralled, to be used solely for management of the livestock herd, with each horse being assigned an Animal Unit Equivalent of 1.25 to be included in determining the maximum number of animal units.

LICENSEE shall restrict supplemental feeding to corral areas or COUNTY approved pastures, so as to prevent the introduction and/or spread of noxious plant species, and shall submit to COUNTY a quarterly report of the type and quantity of supplemental feed distributed, and source or origin of supplemental feed. Such supplemental feeding areas shall be strategically located to enhance the overall range condition and allow for year round access.

5.02 Visual Monitoring and Statistical Sampling. LICENSEE agrees to accompany COUNTY to visually inspect and statistically evaluate the then current grazing conditions of the Premises on a quarterly basis, together with an impartial professional rangeland ecologist, with experience in cattle grazing, to be selected by COUNTY at COUNTY expense. Each such inspection/evaluation shall include the completion, in writing, of a Grazing License Checklist, attached hereto as Exhibit "C" and incorporated herein by reference as though set forth in full, to be signed by both COUNTY and LICENSEE, with a copy provided to LICENSEE.

COUNTY and LICENSEE mutually agree that the Grazing License Checklist shall constitute an integral part of COUNTY's decisions regarding license renewal. LICENSEE is responsible at all times to ensure that the provisions referenced in the Grazing License Checklist are met. COUNTY shall advise LICENSEE, when, in the opinion of COUNTY's authorized representative, any of the aforementioned conditions and land management objectives are not being accomplished. If LICENSEE fails to remedy the condition within thirty (30) calendar days of receipt of notification, then said conduct shall constitute a default and COUNTY shall have the right to terminate grazing and LICENSEE shall remove all cattle within ninety (90) calendar days of first notice above. In the event of drought, overgrazing, and/or other unforeseen rangeland condition COUNTY reserves the option to terminate the License or to determine the reduction of grazing that will not constitute overgrazing. Such aforementioned "overgrazing" shall constitute just one of many items of default. In the event of such termination, any claim by LICENSEE for damages shall be limited to a pro-rata rebate of fees paid in advance as set forth in Section 3.

SECTION 6. REPAIR AND MAINTENANCE OF IMPROVEMENTS

LICENSEE shall keep all facilities in good, functional condition and readily available to safely and effectively perform the purpose for which they are installed. Certain minimum standards of performance are as follows:

6.01 Unless an express responsibility of COUNTY, LICENSEE, at LICENSEE's sole cost and expense, shall install, maintain, repair, and replace, if necessary, all other facilities and improvements including but not limited to all interior fencing, gates, corrals, wells, waterlines and pipes, water troughs, water tanks, windmills, pumps, pressure systems, and paint all buildings and structures which have painted exposed surfaces. If LICENSEE does not perform its obligations within thirty (30) days, or begin performance of its obligations and continue within a reasonable time frame to completion, COUNTY can perform the obligations and have the right to be reimbursed for the sum it actually expends, plus twenty

percent (20%), in the performance of LICENSEE's obligations. LICENSEE shall pay the cost thereof as a part of the fee payable as such on the next day upon which the quarterly fee becomes due, and failure to pay same shall carry with it the same consequences as failure to pay any fee installment. LICENSEE further agrees that he will make no major alterations, repairs or improvements to said premises without, in each case, first obtaining the written consent of COUNTY.

6.02 COUNTY shall maintain all significant roadways and shall provide materials and installation for County Park exterior boundary fencing. Exterior fence maintenance (except for materials) shall be at LICENSEE's expense to COUNTY specifications.

6.03 LICENSEE, at its sole cost and expense, shall arrange for the storage and disposal of all garbage and waste materials in accordance with applicable law.

SECTION 7. UTILITIES

7.01 COUNTY's Obligation. COUNTY shall not be liable for any damages resulting from, and LICENSEE waives all claims against COUNTY, for any failure to furnish or delay in furnishing any utility service, when such failure or delay is caused by any condition beyond the reasonable control of COUNTY as determined by the COUNTY or the rationing or other governmental restriction on any utility or naturally occurring resource serving the Premises. The fee obligation shall not be abated by such reason. A temporary failure to furnish any of the services shall not be deemed nor construed as an eviction of LICENSEE nor relieve LICENSEE of any duty to observe or perform any of the provisions of this License.

7.02 LICENSEE's Obligation. During the term of this License, LICENSEE, at its sole cost and expense, shall contract directly with the appropriate public utility for all water, gas, electricity, portable or underground telephone service, garbage and sewage, or other utility or service furnished to or used by Licensee, and shall indemnify and hold harmless COUNTY from and against any charge for the installation, connection, maintenance and furnishing of all necessary utilities, meters and services. LICENSEE, at LICENSEE's sole cost and expense, shall be required to provide for the extension of any utility service or distribution lines (water, gas, electricity, portable or underground telephone, garbage, sewage, or other) as may be required to serve the Premises. LICENSEE shall comply with all government mandated water and energy conservation programs in fulfilling its obligations hereunder.

SECTION 8. LICENSEE'S ACCEPTANCE OF PROPERTY

At commencement of the term, LICENSEE shall accept the building, improvements, and any equipment on or in the license premises in their existing condition. No representation, statement, or warranty, express or implied, has been made by or on behalf of COUNTY as to such condition, or as to the use that may be made of such property. In no event shall COUNTY be liable for any defect in such property or for any limitation on its use.

SECTION 9. NO ASSIGNMENT OR SUBLICENSE

LICENSEE shall not assign this License, or any interest herein, or sublet the premises, or any part thereof, or any right or privilege appurtenant thereto, or allow any person other than LICENSEE and his agents and employees to occupy or use the premises or any part of them, without first obtaining COUNTY's written consent thereto. LICENSEE shall fully disclose to COUNTY all financial information surrounding such an assignment or sublicense. COUNTY expressly covenants that such consent shall not be unreasonably refused. COUNTY's consent to one assignment, sublicense, or use shall not be a consent to any subsequent assignment or sublicense, or occupancy or use by another person. Any unauthorized assignment or sublicense shall be void, and shall terminate this license at COUNTY's option. LICENSEE's interest is not assignable by operation of law without COUNTY's written consent.

SECTION 10. WATER SYSTEM

Water for grazing operations obtained by LICENSEE under COUNTY's water rights, however acquired by COUNTY, shall be used only on the premises and in the pursuit and performance of LICENSEE's operations and obligations under this License. COUNTY assumes no responsibility to LICENSEE for any water shortage from the source or sources of water, or from any source whatsoever; nor does COUNTY warrant the quality or quantity of water obtained from any source or sources.

COUNTY reserves the right during the term of this License to enter on the premises and all parts thereof, at any reasonable time or times, for the purpose of inspection, consultation with LICENSEE, making repairs or improvements, posting notices and for all other lawful purposes.

LICENSEE shall pay all acquisition, operation, and maintenance, repair, diversion, and dispersion costs and charges and/or water tolls connected with the use of water used for whatever purpose or purposes.

SECTION 11. RIGHT OF ENTRY

11.01 COUNTY shall, after notice, have the right to enter the premises for the purpose of plowing, seeding, fertilizing, prescribed burning and performing customary seasonal work. Such entry by COUNTY shall not, however, interfere with LICENSEE in carrying out regular grazing operations that LICENSEE shall, at the time, have the right to carry out and perform under the terms of the License.

11.02 Public shall have access to all Premises for park and recreation use consistent with historical use of the Park Premises, future Park Programs, and Park Master Plans. COUNTY shall not introduce uses which diminish lbs/acre usable forage, excepting those uses set forth in Section 11.01.

SECTION 12. MITIGATION DEPOSIT

COUNTY acknowledges receipt of _____ Dollars ($_____), which is a mitigation deposit, in an amount equal to the fee assessed for the first quarter as defined in Section 3 above, for LICENSEE's faithful performance of this License. COUNTY is not obliged to apply the deposit to fees or other charges in arrears or to damages for LICENSEE's failure to perform the License. However, COUNTY may so apply the mitigation deposit at its option, for nonpayment of fee or to cure a default for any other reason. The mitigation deposit, or remaining deposit after payments, shall be returned to LICENSEE, without interest, when this License is terminated, after LICENSEE has vacated the premises and delivered possession to COUNTY.

If the mitigation deposit is used as cited above, LICENSEE shall pay to COUNTY on demand the amount applied to restore the mitigation deposit to its original amount.

SECTION 13. TAXES

LICENSEE shall be responsible for the payment of, and shall pay before delinquent, all taxes, assessments and fees assessed or levied upon LICENSEE on said Premises or any interest therein, on any buildings, structures, machines, appliances, or other improvements of any nature whatsoever, or on any interest therein, or by reason of the business or other activities of the business in this License in connection with the Premises.

SECTION 14. INDEMNITY AND HOLD HARMLESS

14.01 COUNTY shall not be liable at any time for loss, damages, or injury to the person or property of any person whomsoever at any time, occasioned by or arising out of any act of LICENSEE or of anyone holding under LICENSEE; nor the occupancy or use of the premises or any part thereof by or under the LICENSEE; nor directly or indirectly from any state or condition of said premises or any part thereof during the term of this License.

14.02 Indemnification of COUNTY. The LICENSEE shall indemnify, defend, and hold harmless the COUNTY, its officers, agents and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, performance of this License by LICENSEE and/or its agents, employees, or subcontractors, excepting only loss, injury, or damage caused solely by the acts or omissions or personnel employed by the COUNTY. The LICENSEE shall reimburse the COUNTY for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which the LICENSEE is obligated to indemnify, defend and hold harmless the COUNTY under this License.

14.03 COUNTY agrees to indemnify and hold LICENSEE harmless from and against all claims arising out of public recreational use of the premises, except to the extent any such claim is caused by the intentional acts or omissions of LICENSEE.

SECTION 15. INSURANCE

LICENSEE agrees to procure and maintain a policy or policies of comprehensive general liability, workers compensation as required by law, and property damage insurance with an insurance company or companies approved by COUNTY, for the benefit of LICENSEE and COUNTY, in accordance with Exhibit "D" incorporated herein by reference as though set forth in full.

SECTION 16. LICENSEE NOT AN EMPLOYEE OR AGENT

It is understood and agreed that LICENSEE, in the performance of this License, is not an agent or employee of COUNTY, and that this License is not intended to and shall not be construed to create the relationship of agent, servant, employee, partnership, joint venture or association. No participant or applicant for participation in LICENSEE's grazing operation, nor any officer or employee of LICENSEE, nor any person engaged by LICENSEE to administer or operate its grazing operation is or shall be construed to be an employee of COUNTY for any purpose, including tort claims; nor shall any person obtain any right to employment, retirement or other benefits which accrue to employees or officers of the COUNTY.

SECTION 17. DEFAULT

17.01 Default. In the event that LICENSEE violates any of the terms and conditions of this License, COUNTY shall give LICENSEE written notice of specific violation and demand for correction within the time periods set forth in Section 17.02.

17.02 Termination for Default. If, within ten (10) days after written notice and demand other than for the payment of money due to COUNTY, LICENSEE has not commenced corrective action or shown acceptable reason therefore, COUNTY has the right to immediately terminate this License, take back possession of the Premises, and pursue any and all remedies provided by law. COUNTY shall have the right to terminate this License on account of failure by LICENSEE to pay money owed to COUNTY within five (5) days after written notice and demand for correction. In the event of termination for default, COUNTY has the right to take possession of all buildings and improvements within the premises (License area).

17.03 Liability for Breach. Termination for default shall not excuse LICENSEE from any liability for breach of contract; such breach shall be deemed total.

17.04 Entry for Mitigation. In the event of default by LICENSEE occasioning subsequent entry by COUNTY, COUNTY may perform the mitigation with the intent that this License not be terminated, provided written notice of such entry and intent has been posted in or on the premises. COUNTY may at its option enter the Premises for the purpose of mitigating damages. LICENSEE shall remain liable for the covenants and conditions of the License for the balance of the term hereof.

SECTION 18. RESTORATION OF PREMISES

Upon termination of this License for any reason, LICENSEE shall vacate the Premises, remove the personal property of the LICENSEE therefrom, excepting COUNTY owned improvements, and repair any damage or injury to the said premises or to any building, structure or improvement located thereon, occasioned by installation or removal thereof and restore the Premises to the same condition as when LICENSEE first took possession.

SECTION 19. MISCELLANEOUS

19.01 Attorney's Fees. If either Party brings any action or proceeding in court to enforce any provision of this License or for damages because of an alleged breach of any provision of this License (except as may otherwise be specified in this License) the prevailing party shall be entitled to receive from the losing party the amount the court determines to be reasonable attorney's fees for the prevailing party.

19.02 Binding Effect. The covenants and agreements contained in this License shall bind the respective successors, assigns, heirs and legal representatives of the parties.

19.03 Employment Practices. LICENSEE shall not discriminate against any person or persons because of race, religious creed, color, national origin, ancestry, sex, marital status, mobility Impairment, medical condition (cancer related), age (over forty), political beliefs,organizational affiliation or sexual orientation as provided by law In the conduct of operations including employment on the Premises or In the use of facilities on the Premises. LICENSEE shall Indemnify and hold COUNTY harmless for any failure to so comply.

19.04 Equal Employment Opportunity. LICENSEE shall at all times conduct Its employment practices In a manner consistent with the spirit of the COUNTY Equal Opportunity and Affirmative Action policies. LICENSEE shall Indemnify and hold COUNTY harmless for any failure to so comply.

19.05 Entire Agreement. This License and any exhibits or addendum set forth all covenants, agreements, conditions and understandings between COUNTY and LICENSEE concerning the Premises. There are no covenants, agreements, conditions or understandings, either oral or written, between the parties other than those set forth In the License.

19.06 Compliance With Law. LICENSEE shall, at LICENSEE's sole cost and expense and prior to the commencement of activities permitted hereunder, comply with all applicable federal, state, or municipal statute or orders, regulations, California Environmental Quality Act (CEQA), orders, or directive of a governmental agency, as such statutes, ordinances, regulations, orders, or directives now exist or may hereafter provide, concerning the use and safety of the premises. LICENSEE shall obtain all permits which may be required by public agencies, Including but not limited to the United States Army Corps of Engineers, Santa Clara Valley Water District, and State Department of Fish and Game, having Jurisdiction over the activities of LICENSEE and comply with all conditions and requirements set forth In the permits issued by such agencies. On the Breach of any provision hereof by LICENSEE, COUNTY may at its option terminate this license forthwith and reenter and repossess the premises.

19.07 Modification. Provisions of this License may be modified, waived or added to only by a instrument in writing signed by both parties.

19.08 Notices. Communications relating to this License or under the unlawful detainer statutes of California shall be in writing and shall be delivered personally, sent by United States mail, first class postage prepaid, or by private messenger or courier service, to the addresses below:

LICENSEE: _____
_____
_____
_____
_____

Director
County of Santa Clara
Parks and Recreation Dept
298 Garden Hill Drive
Los Gatos, California 95030

Any change In address shall be communicated by written notice to the other party.delivered according to this Section. A communication by any method permitted under this Section shall be effective when actually received.

19.09 Personal Liability. No personal liability shall attach to any COUNTY officer or employee with respect to any financial obligation to be performed under this License.

19.10 Remedies Cumulative. All remedies conferred on COUNTY and LICENSEE by this License and by law shall be deemed cumulative and no one remedy shall be deemed to be exclusive of the other or of any other remedy conferred by this License or by law.

19.11 Severability. If any provision of this License or any specific application shall be deemed to be invalid or unenforceable, the remainder of this License or the application of the provision In other circumstances shall not be affected and each provision of this License shall be valid and enforceable to the fullest extent permitted by law.

19.12 Surrender of Premises. No act by COUNTY, its elected officials, officers, agents or employees during the term granted shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept a surrender of the Premises shall be valid unless it is made in writing, addressed to LICENSEE and signed by COUNTY.

19.13 Text to Prevail Over Headings. The captions and section headings appearing in this License are included for convenience only and do not in any way limit or amplify the terms or provisions of this License.

19.14 Waiver. Waiver by COUNTY or LICENSEE of any breach of any term, covenant or condition shall not be deemed to waive the same term, covenant or condition on a future occasion. The acceptance of fees by COUNTY shall not be deemed a waiver of any preceding breach by LICENSEE of any covenant other than the failure of LICENSEE to pay the fee so accepted. No covenant, term or condition of this License shall be waived by COUNTY or LICENSEE, unless the waiver is in writing and signed by the party making the waiver.

IN WITNESS WHEREOF, this License has been made, executed and delivered as of the date and year of the latest signature below.

"COUNTY"
COUNTY OF SANTA CLARA

"LICENSEE"

_____
Zoe Lofgren, Chairperson
Board of Supervisors

Date:_____

_____

Date:_____

Attest:

_____
Donald M. Rains, Clerk
Board of Supervisors

Approved as to form and legality:

_____
Kathryn A. Berry
Deputy County Counsel

Exhibit 3

AN OVERVIEW OF GRAZING IN SANTA CLARA COUNTY PARKS AND OTHER PUBLIC AGENCIES

Joseph D. Grant, Calero Reservoir, and Ed R. Levin Parks were acquired as parklands in the mid 1970's. These areas were grazed before acquisition, and have been leased for cattle and horse grazing under park ownership. Grazing continues at Ed Levin and Grant Ranch, but ceased at Calero in 1986 when the lessee terminated his operation there. Current grazing agreements have been on a month-to-month basis since December 1987, by Board action, pending adoption of a range management policy.

In the early 1980's department staff began to express concern about the deterioration of grazed parkland areas and took some affirmative measures to restrict grazing in sensitive areas of Grant Ranch. In 1987 the Department contracted with James W. Bartolome, Range Ecology Professor at U.C. Berkeley, to study the grazing program. In the report "Assessment of Livestock Grazing in Santa Clara County Parks" (July 1, 1987), Dr. Bartolome examined the grazing resources and range production trends at Ed Levin, Grant Ranch, and Calero, and evaluated the costs and benefits of grazing in these three parks. He identified five management strategies for the Department to consider, depending on the Department's selected management objectives: No grazing; Grazing at present stocking rates with additional monitoring effort; Optimizing range forage production using standard grazing capacity estimates and management practices; Maintaining livestock grazing while enhancing wildlife habitat; Maximizing grazing revenues while protecting riparian corridors (this alternative was identified only for Levin Park).

In this report Dr. Bartolome also suggested the following land use objectives as appropriate to park agencies: Provide public access and recreational use; Protect natural resources for short-term and long-term use; Provide for public safety to park users and adjacent landowners; Minimize fire hazards to wildlands and private property by managing vegetative fuels; Optimize revenues; Rehabilitate degraded vegetation and wildlife habitat; Establish cooperative relationships with adjacent property owners. He also described the public costs and benefits of grazing programs.

Dr. Bartolome's report was the starting point for the Range Management Task Force deliberations. This citizen-staff advisory committee to the Department was formed in May 1988, to develop a recommendation incorporating the diverse views of staff and cattle ranching interests, along with members from the Fish and Game Commission and California Department of Forestry and Fire Protection and aides from Supervisor Legan's (later Supervisor Gonzales') office.

Task Force Members:

Rex Lindsay, Santa Clara County Planning Commission (Former)
Dr. Robert Greenley, Santa Clara County Fish And Game Commission
Betsy Shotswell, Santa Clara County Planning Commission
Bill Maison, California Department of Forestry and Fire Protection
Pat Kammerer, Parks and Recreation Commission
Bob Benson Sr., President, Santa Clara County Cattleman's Association
Douglas Gaynor, Director, Santa Clara County Parks Dept.
Dave Eakin , Deputy Director/Park Operations Santa Clara County Parks Dept.
Larry Coons, Deputy Director/Support Services Santa Clara County Parks Dept.
Denis Besson, Senior Park Ranger, Calero County Park
Ed Tanaka, Senior Park Ranger, Grant Ranch County Park
Reece Current, Senior Park Ranger, Ed Levin County Park

During the Task Force deliberations the grazing program at E.B.R.P.D became the conceptual cornerstone of the Department's current recommendation. The program at E.B.R.P.D. is considered relevant because: (1) its master plan guidelines are similar to those in the County's General Plan; (2) the East Bay has similar climate, microclimates, and range conditions; (3) cattle industry and marketplace considerations are similar; (4) a strong environmental/agricultural interest dialogue has continued over many years.

The Board adopted Natural Environment Section of the County General Plan states that:

> The County shall become a leader in the protection of existing streamside riparian woodlands and grasslands and restoration of degraded streams and streamsides on lands they own and develop for any use. (Page D 1)
>
> Multiple uses of open space lands shall be encouraged consistent with the conservation of resources and the preservation of the nature environment. (D1)
>
> Natural riparian and streamside areas shall be left in the natural state providing percolation, wildlife habitat, aesthetic relief and recreational users that are environmentally compatible. (D2)
>
> Minimizing sedimental and erosion through control of grading, quarrying, cutting of trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal related disturbance of the soil. (D10)
>
> No fences should be erected within the riparian area preventing the free movement of wildlife needing access to the stream. (D13)
>
> The vast grass and mixed grass-woodland areas of the county provide the basis for one of the oldest economic activities in the county, cattle ranching. (D23)

The Task Force also considered the policies of other agencies:

A. East Bay Municipal Utility District (managed as watershed):

E.B.M.U.D owns extensive watershed properties in the Bay Area east of San Francisco. Land management objectives formulated in 1955 included grazing as a tool to prevent fires in order to reduce erosion and reduce liability from wildlife damage to adjacent properties. In 1971 the master plan for Watershed Management Preserve areas designated three land uses including "ranching areas" or grassland areas where topography and access make them suitable to livestock grazing. The justifications (in order of importance) for grazing on these sites are: 1) fire hazard reduction, 2) brush control, and 3) revenues. Prescribed burning as a management tool has not been widely used. Management costs for about 27,000 acres of grazing include 2 full time positions and additional supervisory time. Current annual revenues are approximately $300,000(1987 data). Watershed areas are also used as environmental education areas, nature study areas, and natural preserves. EBMUD is gradually excluding cattle from stream courses, which has considerably increased fencing costs. It has also implemented an expensive program using goats to control brush.

The above paragraph was the E.B.M.U.D. situation in 1987. Since then, they have reduced grazing to 18,250 acres (22,126 AUM at a rate of $17.20.) The agency provides the improvements such as fencing, water development, etc., hence the high rate.

B. California State Parks:

Livestock grazing is permitted in only about a dozen units of the California State Park System, mostly in recent acquisitions. The Public Resources Code prohibits the commercial exploitation of resources on park lands and the State Park and Recreation Commission Policy states that grazing will not generally be permitted unless it is for the benefit of the plan and purpose of the State Parks. Park designations and special uses include natural preserves, cultural preserves, and historical demonstrations. The opponents of grazing argue that preservation of natural communities is not compatible with grazing, while proponents extol its value as a demonstration of historic land use. Public debates have also focused heavily on fire hazard control. In the Santa Clara/Santa Cruz area State Parks, grazing only occurs on a small dairy farm operation on the coast and a 600 acre grazing easement at Henry W. Coe State Park has recently been terminated.

C. East Bay Regional Park District:

East Bay Parks is currently reviewing its grazing policy. Currently, livestock management guidelines are an operational document, not a policy statement. At present, livestock graze about 30,000 acres of East Bay Parkland, and until now grazing income has exceeded management costs (one full time salaried range

management specialist). Capital costs have increased significantly in recent years as more intensive developments have been installed to control grazing in sensitive areas. Grazing in EBRPD is used as a management tool to reduce fire hazard and to maintain open grasslands, believing that, for brush control purposes, grazing is less expensive than mechanical methods, and prescribed burning and herbicides are less desirable from the public's point of view. During the recent years of drought, E.B.R.P.D. has greatly-reduced herd sizes and has eliminated grazing altogether in highly impacted areas.

D. Midpeninsula Regional Open Space District:

The Midpeninsula Open Space District provides about 23,000 acres of "natural preserves" for San Mateo and Santa Clara Counties, much of which was formerly grazed. Their policy and objectives include 1) protection of natural vegetation, and 2) protection of agriculture. They have, however, allowed all but one of their grazing leases to expire. They recently evaluated the costs and benefits of implementing a proper grazing system for the remaining lease. Annual management costs included an estimate of 31 days (about $5000) of personnel and consultant labor for the one remaining lease. Environmental analysts recommended that grazing be discontinued. Discussions by neighbors suggested a desire for conditions favoring low human use of these areas rather than strong sentiments about grazing per se. At this time 1100 acres are grazed as part of the original land purchase agreement. Midpeninsula provides double-wide disked fuel breaks along roads and adjacent developed private property. They have no burning program. A recent cost-benefit analysis determined that costs would far exceed revenues in M.R.O.S.D.

E. Marin County Open Space District:

Grazing occurs on some of these lands and is justified primarily as a method of fuel hazard reduction and for "scenic backdrop". Marin rangers felt it was too time consuming to monitor the program, so a local range professor was contracted at $2,000 annually. Complaints from the public have included flies, manure, fear of livestock injury to children, damage to wildflowers, and the use of electric fencing for sheep grazing.

F. San Francisco Municipal Water District

Grazing is currently allowed on about 37,000 acres of San Francisco watershed lands in the east bay. It is not allowed on 27,000 acres in San Mateo County which are managed as a fish and game preserve. Justification for cattle grazing on the watershed includes fuel hazard reduction. Annual costs of fuel reduction for the ungrazed 27,000 acres of San Mateo properties have been estimated at about $10,000.

G. Summary of Agency Policies and Practices

Discussions about the role of grazing are under way by many agencies. The trend has been away from heavy grazing and toward greater concern for natural resource values. Agencies are attempting to evaluate policies and practices, but explicit agency objectives are often lacking or open to interpretation. At present the major objectives appear to be: fuel reduction and income generation. Educational or aesthetic values are also mentioned. Most large agencies have at least one full time position to manage range agreements. Other costs of grazing include damage to natural resources and concerns for public safety.

THE PUBLIC PARKLAND BENEFITS OF GRAZING PROGRAMS

Fire Hazard Reduction:

Wildland fire danger is high in coastal and inland areas of California because of our Mediterranean type climate. The California Department of Forestry (CDF) requires fuel reduction where there is wildfire hazard to adjacent rangeland or forestland. Liability concerns are often highest where residential areas are located next to or near the parks. Grazing by livestock reduces grass fuels. Brush presents an even greater fire hazard, and proper grazing management of coastal scrub has been shown to prevent brush encroachment into grasslands. Grazing exclusion, therefore, may increase fire hazard and require other means of fuel reduction. In this sense, grazing benefits include avoided costs of fuel reduction.

Fuel hazards can be reduced by providing fuelbreaks which are maintained annually, or by periodically reducing fuel loading over large areas. The need for fuel hazard reduction depends on the topography and the hazard presented by adjacent properties. Greater hazards are presented by areas that slope uphill to private property and areas with heavy fuel loading. Roads, streams, rocky ridges, and heavily grazed adjacent pasture impede the spread of wildfires.

Alternatives to grazing for fuel hazard reduction include mechanical methods such as mowing or disking and prescribed burning. Costs for disking range from $100 to $235 per mile for a 15 foot wide fuelbreak or about $100 per acre. Mechanical methods may result in undesirable vegetation due to soil disturbance. Burning is relatively inexpensive, but costs vary according to terrain and vegetation. Average costs as of 1984 were $24 per acre. Costs for previous burns at Joseph D. Grant were estimated at $10 to $12 per acre. NOTE: The Department currently disks fuel breaks on selected boundaries, guided by County Fire Marshall or CDF requirements as applicable.

Grass fuels may be mowed or disked annually to reduce fire hazards. Although mechanical methods are labor intensive, they require less coordination and are less subject to delay or cancellation than burning. Because of the planning efforts required and the associated liability, the use of prescribed burning should be carefully evaluated, and is probably not suitable for annual grassland treatments. The California Department

of Forestry and Fire Protection conducts a Vegetation Management Program which provides for prescribed burning to control unwanted brush and other vegetation to eliminate fuels that carry wildfires. To date they have not conducted any prescribed burns in lieu of grazing in California and do not have a policy per se. They have indicated willingness to assist public agencies on a cost-sharing basis. They would provide the expertise and equipment and bear the liability.

Brush control for fire hazard reduction should be conducted at 3 to 5 year intervals. CDF will not generally burn brushlands that are less that 500 acres. While the public has not been very supportive of burning in the east bay area, Santa Clara County residents may be more receptive because of the large agricultural interests. However, the CDF budget for prescribed burning has been greatly limited due to the States fiscal crisis and the Bay Area Air Quality Control Board is steadily tightening its standards for clean air, and its controls on burning.

Livestock grazing can reduce invasion by coastal scrub species. Brush invasion is undesirable when it impedes trail access and recreational use, or presents a health and safety hazard, such as poison oak or hiding cover for rattlesnakes. A mosaic of brush, grass, and woodland, can improve wildlife habitat and increase the value of the park to hikers and birdwatchers. Other brush control measures include mechanical removal, herbicides, or prescribed burning.

Brush species at these parks include coyote brush, chamise, manzanita, ceanothus, chinquapin, toyon, coffeeberry, coastal sage, and poison oak. The behavior of these species with respect to grazing is not well documented except for coyote brush. Coyote brush has spread in some areas after grazing was removed. Establishment of coyote brush seedlings may be related to burns in some areas. Other studies suggest that high rainfall years may be primarily responsible for sporadic establishment and expansion of coyote brush stands. Poison oak, which is present all over Joseph D. Grant and Calero Parks, appears to be more prevalent in ungrazed or lightly grazed areas.

If grazing is excluded, brush will probably invade grasslands on the shallower soils of Grant and Calero Parks. Serpentine areas, south facing slopes, and moist bottomlands should remain open. Encroachment at Levin is less likely due to deeper soils; however, Coyote brush control is ongoing at the park. Where fire hazard reduction is not a problem, brush should be compatible with low intensity recreational use. If desired, brush can be burned every 10 or 15 years on selected areas.

THE COST OF GRAZING PROGRAMS (Primary source: Bartolome report, 1987)

1. License Management Costs

Current park and county costs include license negotiation and administrative costs. Contract development costs were estimated at 30 hours every 3

years and 1 hour monthly. Clerical support was estimated at 6 hours monthly. General license inspection costs (have been estimated at 5 hours per month.

A 1987 report to Midpeninsula Open Space District recommended 11 days per year to monitor 1200 acres. Other local agencies use 1 or 2 full time staff to manage 20,000 to 30,000 acres of leased grazing land. Indirect costs of livestock grazing include increased trail maintenance. Potential cost increases under proper management include fencing, water development, and additional monitoring costs.

2. Environmental Impacts

Annual grasslands: The grasslands in these parks are dominated by annual grasses and forbs which can tolerate relatively heavy grazing. Unlike perennial grassland where stocking rates and grazing season must be carefully controlled to ensure adequate reproduction, annual grasses generally produce abundant seed even when heavily grazed. However, heavy grazing can leave inadequate amounts of organic matter which is needed to maintain good soil structure and a suitable environment or "microsite" for seedling establishment. This tends to deter grass germination the following fall, thus reducing early season production and decreasing overall carrying capacity. Continuous heavy grazing can also decrease carrying capacity by promoting less desirable species (hairgrass, star thistle, nitgrass, little quaking grass, tarweed). Annual legumes which are very good forage for wildlife as well as livestock require some grazing or they will be out competed by taller grasses. However they may also be damaged without periodic rest during seedset.

A visit to Ed R. Levin in April 1987 indicated heavy utilization. Although it had been a relatively dry winter, the period of rapid growth in annual grasslands is the time when production generally "gets away" from animals, even under heavy stocking. This was not the case at Ed R. Levin where grass was closely grazed even on steep slopes. Calero Reservoir which was not grazed for most of this growing season exhibited less than potential production on some areas, indicating inadequate mulch left the previous season. Staff at Calero have reported a great increase in wildlife since grazing was terminated in 1986. Joseph D. Grant had several localized areas of extremely heavy use.

Native Perennials: Native perennial grasses once comprised a significant portion of California's annual grasslands. These species are not, however, very tolerant of season long grazing, so they were mostly replaced by annual grasses and forbs which were introduced with livestock in the early 1800's. Because the annual grasses tolerate grazing and are very competitive as seedlings, the perennial species are not likely to reestablish once they've

been eliminated even if livestock are excluded. However, relict stands may increase in vigor and reproduction with grazing exclusion or deferment till seedset. Scattered stands of needlegrass and wildrye were observed in Joseph D. Grant (e.g. among oaks in east side of Hotel Field). Calero Reservoir which has a large serpentine outcrop ridge has several extensive and healthy stands of needlegrass which should be properly managed.

Rare Plants: Several rare plants have been found in Santa Clara County, although none are presently recorded by the California Natural Diversity Data Base (CNDDB) in any of the parks. Potential species include Mt. Hamilton thistle, Metcalf Canyon jewel flower, Mt. Hamilton coreopsis, large butterfly flowered fiddleneck, coyote ceanothus, rock sanicle, and bay checkerspot. Calero may provide suitable habitat for the thistle which occurs mostly on serpentine and is found at 800 to 1300 foot elevations locally. The jewel flower and ceanothus also occur on serpentine soils at similar elevations. The sanicle, coreopsis, and fiddleneck have been found at 3000 to 4000 foot elevations. Most bay checkerspot butterfly populations have disappeared due to the combination of drought and grazing. If this species were present, protection from grazing would be appropriate. If any of the other species are present, it is quite possible that they are adapted to grazing. Grazing exclusion could in some case favor vegetation which competes with them. For more information, surveys should be conducted by rare plant specialists.

Oak Woodlands: Oak woodlands of the inner coast range and valley are used primarily for grazing where tree canopy cover is light or moderate. The oaks themselves are browsed and the acorns are also eaten. Heavy use in oak woodlands is indicated by distinct browse lines on the trees. While there is no evidence that browsing impairs the vigor of mature trees, grazing of seedlings and saplings at this level of use may significantly impact regeneration. The oaks that are present in these parks include coast live oak, interior live oak, blue oak, valley oaks, and black oaks. There is statewide concern about the general lack of regeneration of blue and valley oaks. Coast live oak is also exhibiting poor regeneration in middle and northern California locations.

Oaks have been heavily browsed in all three parks. In Ed R. Levin the oaks are all located along the creeks and drainages which were heavily used areas. Distinct browse lines, even on live oaks, were present in all parks Live oaks are not very palatable, so browsing indicates relatively heavy stocking. Browse lines may, however, persist for a long time as oaks in areas of Grant that have been protected for about 8 years suggest Although regeneration is easily missed among poison oak understory, oak saplings should be visible. There was no evidence of blue or valley oak regeneration except in protected areas near Grant Lake. Live oak

regeneration was observed in the Brush Field Pasture at Joseph D. Grant. Some observers feel that oak seedlings are damaged more by trampling than browsing.

The levels of regeneration needed to maintain oak stands have not been well established for many areas or for different stand ages. Many factors, including grazing, may contribute to poor regeneration. In Grant Park, oak regeneration was apparent in one protected area but not others. Where regeneration is desired, heavy livestock use would not be acceptable with out protecting seedlings. Unfortunately grazing systems that are compatible with oak regeneration have not been identified.

Riparian and Wetland Sites:Streams and wet areas such as seeps and springs support riparian vegetation and lush growth. Streamside vegetation maintains water quality, prevents bank erosion, and helps regulate stream flows and flood regimes. Riparian and wetland vegetation provide important wildlife habitat, especially amid dry annual grassland and oak woodland habitat types. The succulent plant growth, however, also attracts livestock which can readily eliminate herbaceous cover, compact soils, browse and destroy woody riparian species, and impair water quality for on-site and downstream use.

At Ed R. Levin Park, Calero and Scott Creeks are heavily used and there is no herbaceous or woody riparian cover along the creeks. Streamside cover is more abundant at Calero, but streams are ephemeral. The lower stock pond has potential to support better riparian vegetation than it does currently. The seep in the pasture above Javelina Loop has some growth in and around it, but the fence that was built to protect it was cut and cattle and pigs have damaged it. The availability of nearby woodland cover make these areas potentially very valuable to wildlife. Joseph D. Grant Park has much better riparian and wetland resources. The following areas have been protected: Grant Lake, San Felipe Creek and adjacent lowlands a seep on the east side of Brush Field, and the marsh north of Grant Lake. Unprotected and heavily used areas include Eagle Lake and the stock pond below it, seeps all along North Field, a large scale in Pala Seca Field, and a small stockpond nearby. Nearby oak woodlands enhance the value of the scale and many of the ponds for wildlife because they provide cover.

Severity of impacts to riparian resources depends on potential productivity of these sites. For these parks, riparian quality is probably most important for wildlife habitat in those areas that have other cover nearby. Under livestock use, most of these areas would require complete protection to significantly improve them.

Wildlife Habitat Resources: Oak woodlands provide habitat for many animal species. Resident species include deer, quail, turkey, wild pig, bobcat,

foxes, coyote, and golden eagles. Bald eagle and peregrine falcon have used Joseph D. Grant park in the past and a bald eagle has recently been photographed over Calero. Potential impacts from livestock grazing include reduction of brush and oak cover for many species, feeding competition for oak acorns and browse, reduction of tall grass cover for nesting birds and small mammals, elimination of riparian cover for fish, waterfowl, and terrestrial species, social avoidance between cattle and deer, and transmission of livestock diseases.

Deer numbers have decreased significantly at Joseph D. Grant and Ed Levin Parks during the last ten years. Bluetongue, EHD and PI3, diseases which can all be transmitted by livestock, are important causes of mortality. Livestock can also impact fawning cover by grazing and trampling riparian and wetland vegetation. Turkey breeding was concentrated in Calero Park this season rather than adjacent properties, possibly due to livestock removal.

Moderate livestock grazing may in some cases enhance habitat for species such as quail by providing openings with short grasses, legumes and broad leaved forbs. Grazing may indirectly enhance hawk and eagle foraging by enhancing ground squirrel populations. Ground squirrels which are abundant in Ed R. Levin and Joseph D. Grant Parks are also generally undesirable in public parks because they cause structural damage to roads, trails, etc. and transmit disease.

Livestock impacts to wildlife habitat are most apparent on riparian areas. Protection of several ponds would increase habitat for fish, birds, waterfowl, and mammals. Livestock exclusion from these areas may also reduce indirect contact with deer and thus decrease the transmission of diseases caused by livestock.

Soils: The soils of Joseph D. Grant Park are dominated by the Los Gatos-Gaviota-Vallecitos soils association. These are well to excessively drained gravelly loams which occur on gentle to steep slopes. These soils are occupied by grasslands, woodlands, and some brush, and forage production ranges from about 1,000 to 2,400 lbs. per acre depending on rainfall. Erosion hazard ratings range from slight to high (USDA 1974), but there is little apparent erosion in either park. Due to the steep topography and the low permeabilities of some of these soils, the maintenance of vegetative cover is important to minimize soil runoff.

Soils in the eastern part of Santa Clara County have not been mapped. Soils of Calero probably include those described above as well as the Montara-Inks-Henneke formation. The latter are steep, excessively well drained shallow clay loams and gravelly loams. Roadcuts indicate extensive areas of serpentine soils. These are relatively nutrient poor and support

less vegetation than surrounding soils, but often support rare plants. Perennial grasses and chaparral species are found on these soils. The Los Osos-San Benito soil association is found in the vicinity of Ed R. Levin Park. These soils which occur on moderately to very steep terrain, are well drained, deep clay loams. They primarily support grasslands where production ranges from about 1,200 to 3,000 lbs. per acre. Erosion hazard is rated as moderate to very high, but there is also little evidence of erosion. In general, in spite of these erosion potentials, grazing appears not to be impacting soil stability in these parks.

Conflicts with Recreational Use: Cattle are regarded as a nuisance by some park users because of cattle manure, flies, damage to soils and vegetation in streams, ponds, and wet meadows, and encounters with the animals in some cases. Cattle can also cause substantial trail damage, requiring more frequent repair and grading. At Grant Park and Ed Levin trail use by horses during the rainy season is regulated somewhat, with limited success, but livestock have access to the trails all year long. On the other hand, livestock grazing in public parks may if developed through a 4H program, have value as an educational demonstration of traditional rural lifestyles, especially since most rangeland is privately owned.

Discussions with park rangers revealed little complaint from the public about grazing. Occasional concerns are about wildflowers and interactions with livestock, especially bulls. If grazing use is justified as an educational demonstration, it may be advisable to develop an educational program with interpretive talks, guided walk, leaflets, or posted materials funded by grazing revenues.

SUMMARY

Thoughtfully-conceived and carefully-managed and monitored grazing programs may often be the most cost-effective means to accomplish land management objectives such as fuel hazard reduction and grassland maintenance. The Department's proposed "Parkland Range Management Policy" is an appropriate starting point, as it puts parkland stewardship values at the forefront of the decision-making process and guarantees, that the program will be reviewed publicly at least every 4 years.