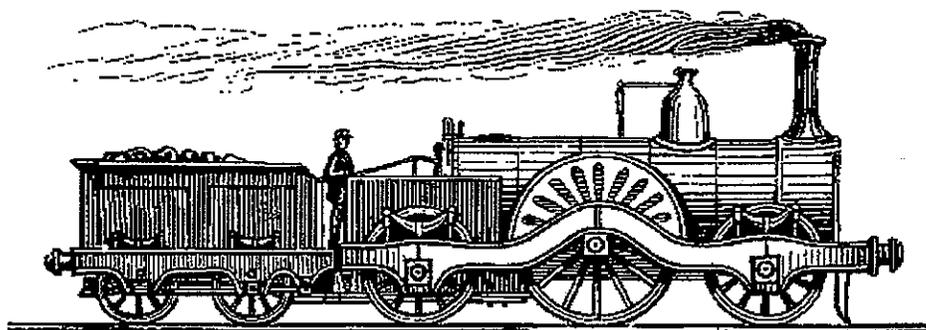


Sacramento-Placerville Transportation Corridor

MASTER PLAN

February 25, 2003

First Edition



Prepared by:

El Dorado County Transportation Commission

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Prepared for:

El Dorado County Department of Transportation

Sacramento-Placerville Transportation Corridor

Master Plan

**Approved by the
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February 25, 2003
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TABLE OF CONTENTS

TABLE OF CONTENTS	iii
LIST OF FIGURES	iv
EXECUTIVE SUMMARY	v
I. INTRODUCTION	1
A. Background	1
B. Setting	3
C. Development of the Master Plan	16
II. GUIDING PRINCIPLES	18
III. PLANNED USES	19
IV. ENVIRONMENTAL PROTECTION AND ENHANCEMENT	19
A. General Strategies (applicable to all uses)	19
B. Specific Strategies	22
V. DESIGN GUIDELINES	22
A. Guidelines for Corridor Uses	23
B. Guidelines for Environmental Protection and Enhancement Strategies	33
VI. GUIDELINES FOR DEVELOPMENT ADJACENT TO THE CORRIDOR	38
VII. PLAN IMPLEMENTATION AND PHASING	38
Appendix A -- Sources	A-1
Appendix B -- Trailhead/Staging Areas	B-1
Appendix C -- Mitigation Monitoring Program	C-1

LIST OF FIGURES

Figure 1	Sacramento-Placerville Transportation Corridor	2
Figure 2	El Dorado County Segment of the SPTC Corridor.....	4
Figure 3	General Plan Land Use Designations of Adjacent Lands	7
Figure 4	Population Density in Surrounding Areas	8
Figure 5	Surrounding Terrain.....	9
Figure 6	Surrounding Terrain.....	10
Figure 7	Surrounding Terrain.....	11
Figure 8	Surrounding Terrain.....	12
Figure 9	Surrounding Terrain.....	13
Figure 10	Surrounding Terrain.....	14
Figure 11	Surrounding Terrain.....	15
Figure 12	Design Considerations for At-Grade Road Crossings	25
Figure 13	Guidelines for Trails Adjacent to Channels	26
Figure 14	Natural Trail Standards	27
Figure 15	Improved (Semi-Hard Surface) Trail Standards.....	28
Figure 16	Paved (Hard Surface) Trail Standards	29
Figure 17	Standards for Parallel Trails.....	30
Figure 18	Standards for Trails Parallel to Excursion Rail Service.....	32
Figure 19	Typical Signage Along Trails	34
Figure 20	Staging Area Prototype.....	36
Figure 21	Sample Call Box Designs	37
Figure 22	General Steps to Implement Projects.....	40

EXECUTIVE SUMMARY

In July 1991, the Sacramento-Placerville Transportation Corridor Joint Powers Authority (SPTC-JPA) was formed to purchase the Sacramento-Placerville railroad corridor from Southern Pacific Railway Corporation. The four agencies of the SPTC-JPA are:

- The County of El Dorado;
- The County of Sacramento;
- The Sacramento Regional Transit District; and,
- The City of Folsom

In order to preserve the continuity of the corridor, the purchase was made under the protection of Federal law [16 USCS § 1247 (d)] which encourages State and local agencies and private interests to acquire, use, and preserve rail transportation corridors for future reactivation of rail service.

At the time the El Dorado County Board of Supervisors agreed to participate in the purchase, County staff was directed to prepare a draft Master Plan that would identify alternatives for near-term use of the corridor. This plan is the product of that direction.

Twenty-eight (28) of the 53 miles of the Sacramento-Placerville Transportation Corridor purchased by the SPTC-JPA are within El Dorado County, milepost 119.4 (El Dorado/Sacramento County line) to milepost 147.6 at Apex, on the west end of Placerville. The width of the right-of-way varies from as narrow as 66 feet wide to as wide as 200 feet.

The Master Plan was developed in a cooperative process, over a two-year period, with two distinct groups of varying preferences:

- A Community Advisory Committee, including area residents, owners of property along or near the corridor, advocacy groups that support one or more use concepts, and other area residents; and
- A Steering Committee of El Dorado County and other local agency representatives.

In addition to working closely with these two committees, several additional public outreach programs were utilized from the inception to maximize public input and awareness.

From the early community meetings, a set of "guiding principles" was developed for the preparation of the Master Plan. Consideration of these principles is reflected in the planning process and in the resultant Master Plan. Adherence to these principles has been maintained to the maximum extent possible.

- The Master Plan must not jeopardize the commitment to preserve the corridor for the potential, future reactivation of rail service.
- The Master Plan process must be open and interactive with the community.
- Environmental impacts must be fully identified and minimized.
- The Master Plan must be based upon a system of uses that is integrated internally and externally.
- The Master Plan must consider and balance competing visions for the future of the corridor.
- The Master Plan must place a high priority on the safety of neighboring residents and potential users.
- Local, general funds that are available for other general government purposes must not be used to implement, maintain, or operate projects on the corridor.
- The value of adjacent properties must not be negatively impacted.
- The historic aspects of the corridor must be preserved.
- Private enterprises must pay for all of their associated costs and contribute additional funding for other corridor-related activities, such as policing and vegetation control.

The Master Plan identifies multiple uses, including excursion trains, trails, and utility easements. It also identifies related environmental protection and enhancement strategies such as fencing, landscaping, signing, maintenance, vegetation control and other fire prevention/control actions.

I. INTRODUCTION

A. Background

In July 1991, the Sacramento-Placerville Transportation Corridor Joint Powers Authority (SPTC-JPA) was formed to purchase the Sacramento-Placerville railroad corridor from Southern Pacific Railway Corporation. The four agencies of the SPTC-JPA are:

- The County of El Dorado;
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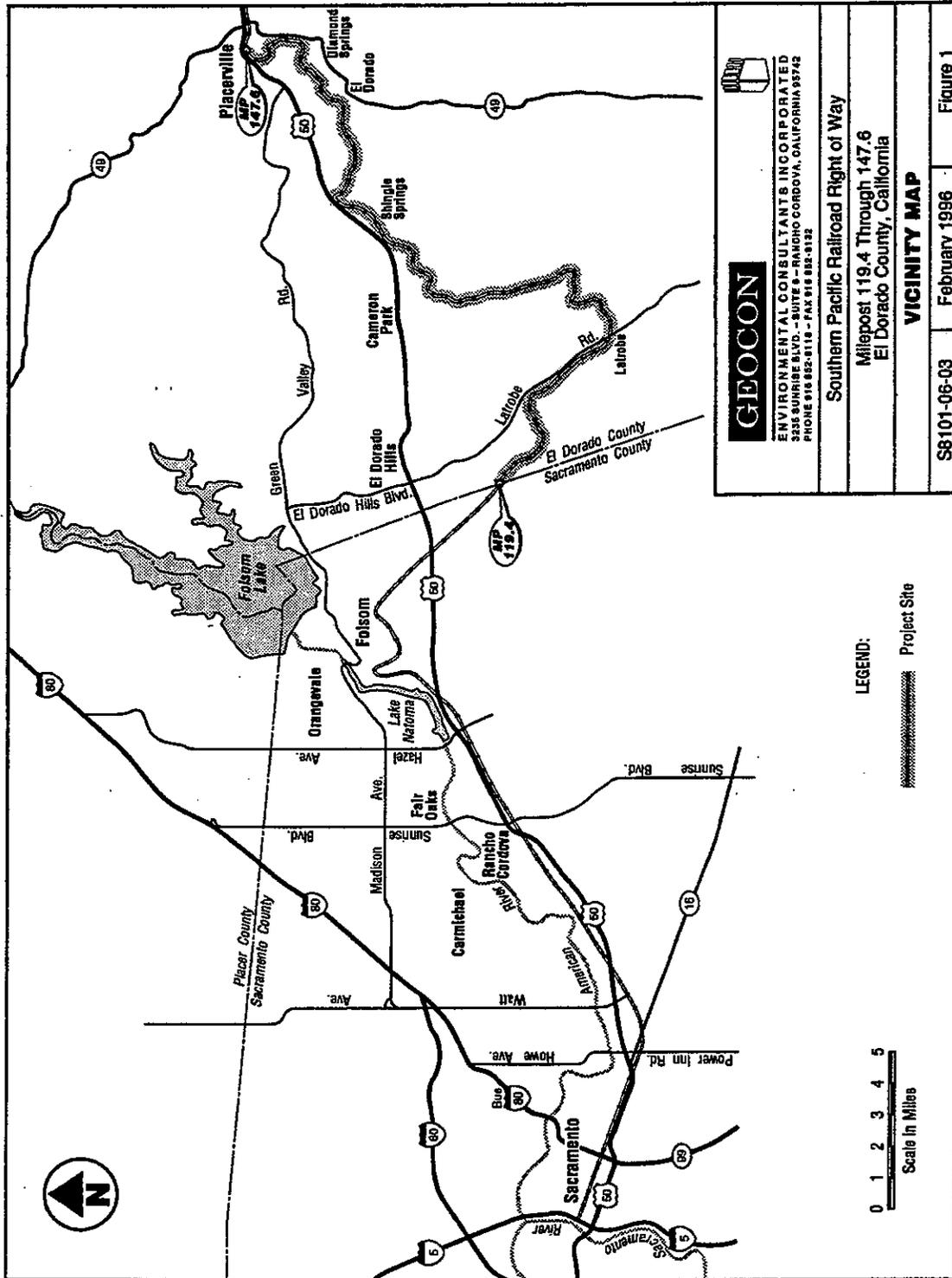
The purchase was completed in September 1996 shortly before the merger of Southern Pacific into Union Pacific. The Sale Agreement/Placerville Branch included the real property, railroad facilities, and structures from 65th Street in the City of Sacramento to Apex, just west of the Ray Lawyer Drive Highway 50 over crossing and Forni Road in Placerville. The corridor is identified in Figure 1.

The SPTC-JPA has only minimal staff. Most of the ongoing administration and development of the corridor has been delegated to the individual member agencies through a Reciprocal Use and Funding Agreement.

In order to preserve the continuity of the corridor, the purchase was made under the protection of the "rails-to-trails provision of the National Trails System Act [16 USCS § 1247 (d)] which encourages State and local agencies and private interests to acquire, use, and preserve rail transportation corridors for future reactivation of rail service. Further, Federal law states that:

If such interim use is subject to restoration or reconstruction for railroad purposes, such interim use shall not be treated, for purposes of law or rule of law, as an abandonment of the use of such rights-of-way for railroad purposes.

Although the El Dorado County portion of the corridor currently has little significant value as a passenger or freight rail corridor, its inherent value as a transportation corridor cannot be overlooked. Moreover, it would be prohibitively expensive to replace the corridor should it ever be relinquished. Several possible changes in circumstance would warrant a reconsideration of the use of the corridor for passenger or freight rail purposes. These include:



 GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED 535 SUNRISE BLVD. - SUITE 9 - RANCHO CORDOVA, CALIFORNIA 95742 PHONE 916 852-0118 - FAX 916 852-8132	
Southern Pacific Railroad Right of Way Milepost 119.4 Through 147.6 El Dorado County, California	
VICINITY MAP	
S8101-06-03	February 1996
Figure 1	

Figure 1

Sacramento-Placerville Transportation Corridor

- future commercial, industrial, or residential developments;
- changes in economic circumstances; or
- technological advancements.

Several interest groups strongly advocated the El Dorado County Board of Supervisors' participation in the purchase. These groups represented excursion rail interests, recreational trail interests, commute transportation interests, and utility easement interests.

At the time the El Dorado County Board of Supervisors agreed to participate in the purchase, County staff was directed to prepare a draft Master Plan that would identify alternatives for near-term use of the corridor. This plan is the product of that direction.

Subsequent to the purchase, the Board of Supervisors contracted with the El Dorado County Transportation Commission to prepare the draft Master Plan. The El Dorado County Transportation Commission is a State-mandated agency responsible for regional transportation planning in El Dorado County. The Commission is governed by a six-member board, three members appointed by the City of Placerville and three members appointed by the County of El Dorado. The El Dorado County Transportation Commission has no role in approving the Master Plan.

Other members of the SPTC-JPA are expected to have separate processes for determining use of the sections of the corridor within their jurisdiction.

The Master Plan is for the El Dorado County portion of the Sacramento-Placerville Transportation Corridor only. It is not intended as a study of the general feasibility or appropriateness of any mode of transportation in the County. Rather, it considers the feasibility of each interim use, for the corridor as it was acquired. Re-stated, the uses identified herein should not be extrapolated to determine what regional transportation systems are needed to accommodate regional travel demand.

B. Setting

Twenty-eight (28) of the 53 miles of the Sacramento-Placerville Transportation Corridor purchased by the SPTC-JPA are within El Dorado County, milepost 119.4 (El Dorado/Sacramento County line) to milepost 147.6 at Apex, on the west end Placerville. The El Dorado County portion of the corridor is depicted in Figure 2. The width of the right-of-way varies from as narrow as 66 feet wide to as wide as 200 feet.

In addition, the County controls several large parcels along the 28-mile corridor that were previously used as loading docks and other staging areas for rail activities.

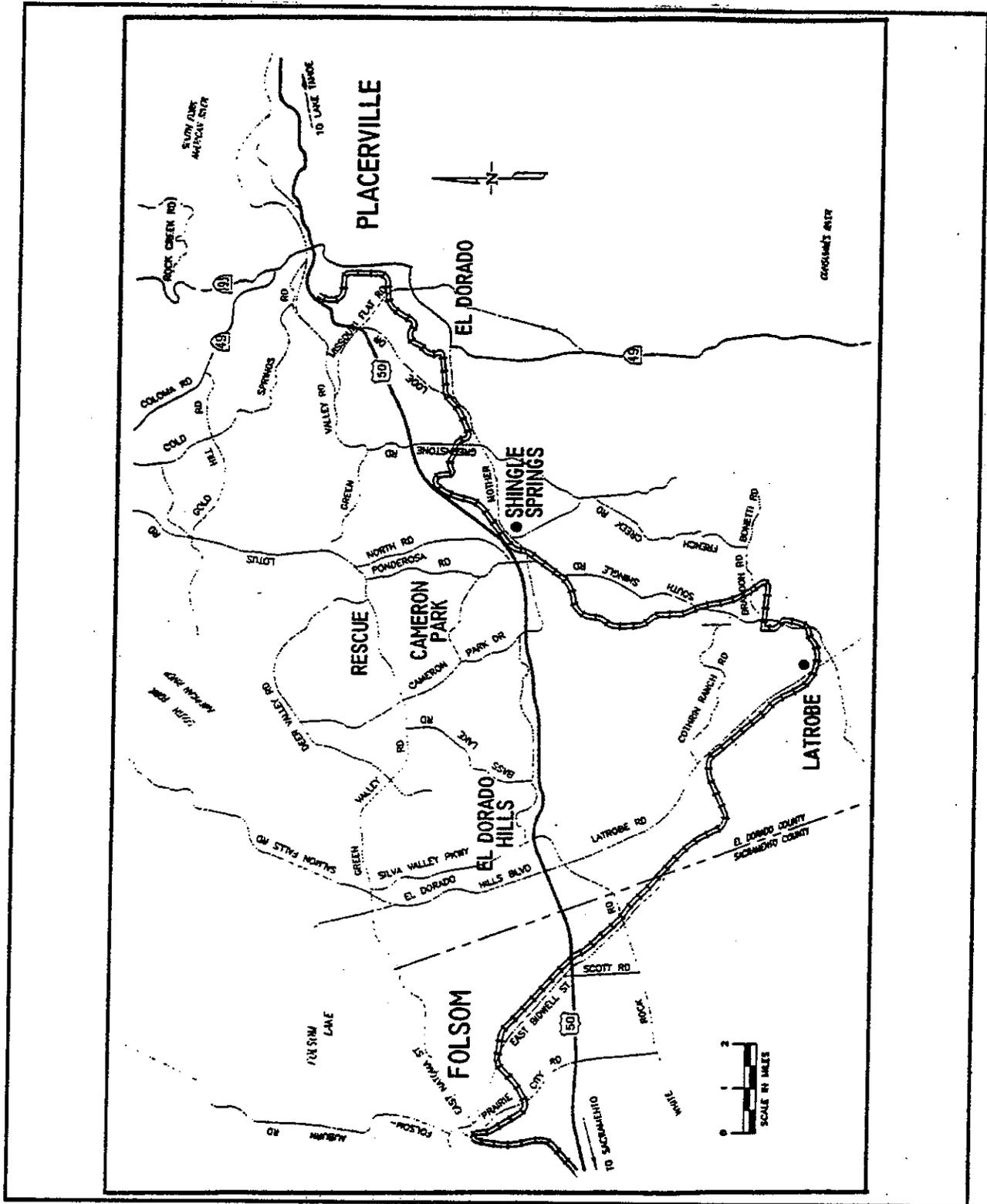


Figure 2

El Dorado County Segment Of The SPTC Corridor

One of the most prominent considerations in preparing the Master Plan was the opportunities and constraints presented by the physical characteristics of the greater corridor area.

Terrain

The right-of-way climbs from a 500-foot elevation at the Sacramento County line to approximately 2,000 feet at Apex, maintaining a 3 percent grade or less throughout its length. From the Sacramento County line to the community of Shingle Springs, the corridor maintains the open, rural character of the oak woodland. To the east, the vegetative character of the area surrounding the rail line changes. The tree stands become more dense and much of the right-of-way is shaded.

The areas adjoining the corridor are as diverse as El Dorado County. The more rural lands immediately adjacent to the corridor are generally classified for rural residential uses, while the more urban lands are intended for a wide range of residential and non-residential uses.

Figure 3 identifies the General Plan land use designations and Figure 4 depicts the population densities in the vicinity of the corridor. Figures 5 through 11 are photos of typical view sheds along the corridor.

Current Uses

Since Southern Pacific did not actively use the corridor for several years prior to selling it, several informal uses have evolved. Local residents walk the corridor for exercise and recreation. There also have been reports that motorized and non-motorized vehicles occasionally use the corridor for recreational purposes. These existing uses are not sanctioned by El Dorado County or the SPTC-JPA.

Utilities and Easements

There are some existing overhead electric and telephone utilities along the right-of-way; however, since no new overhead utilities have been added since rail operated on the line any use of the alignment should not impact these facilities.

There are also numerous underground utility easements within the right-of-way alignment. These lines are usually buried under the ground at depths which are not affected by pressures exerted from rail vehicles, bicycles or pedestrians.

In some cases, these leases and easements may make future implementation of projects more difficult. Also, real property law prohibits any action which would result in "landlocked" parcels. Resolution of these issues will be addressed during the development of specific projects.

Leases

The County administers approximately 75 leases with various entities and private interests. Most of these leases the County acquired with the purchase of the corridor from Southern Pacific. Of these leases, 49 are for utilities, nine are for road crossings, nine are revenue

generating, and eight are for other uses. The County collects approximately \$16,428 annually from the nine revenue-generating leases.

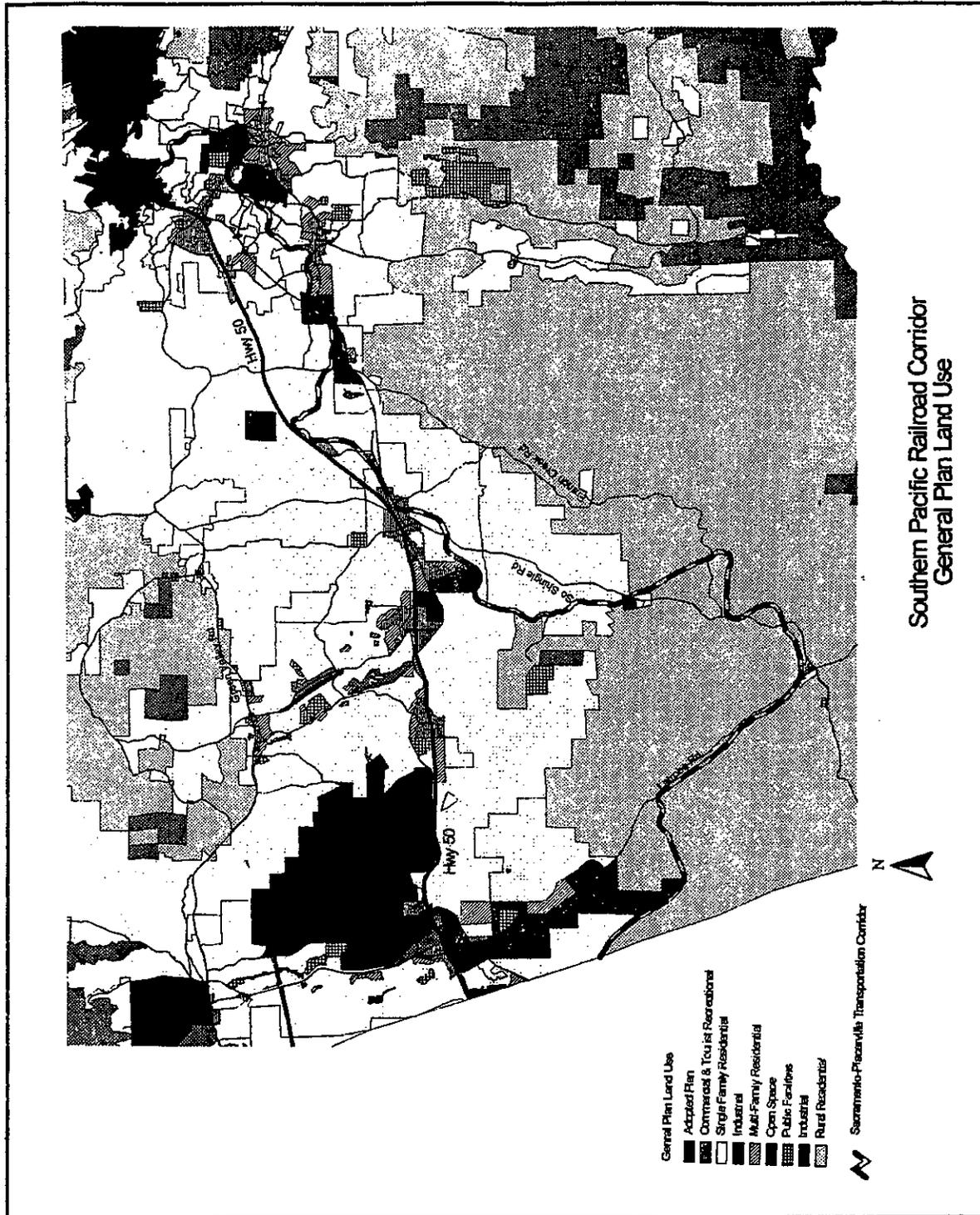


Figure 3

General Plan Land Use Designations Of Adjacent Lands

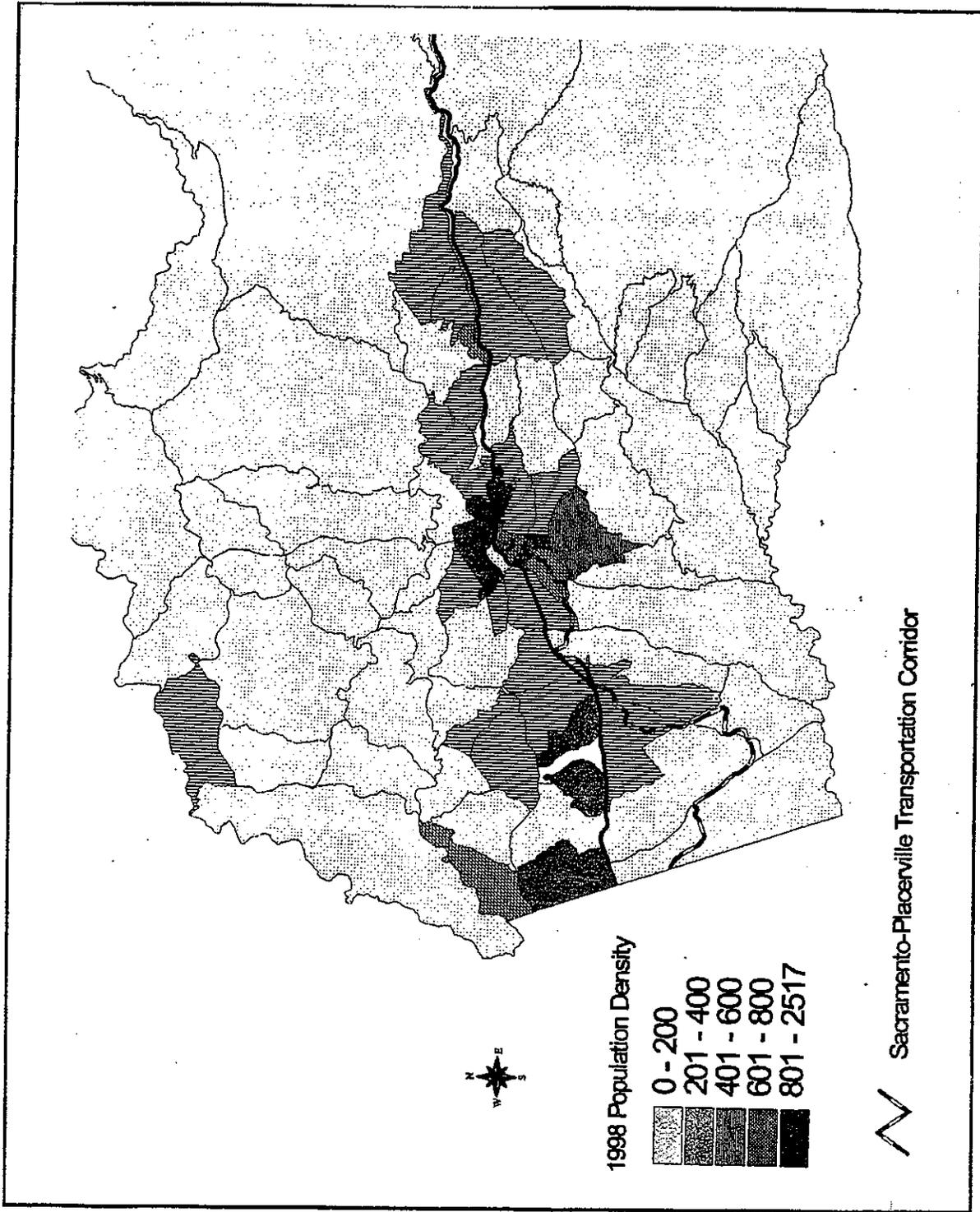


Figure 4

Population Density In Surrounding Areas

View from El Dorado County line towards Latrobe. This segment is primarily bordered by grasslands.



Another view towards Latrobe showing a grove of native oak trees.

Closer to the town of Latrobe, the railroad is adjacent to rural ranches and more variety in the landscape.

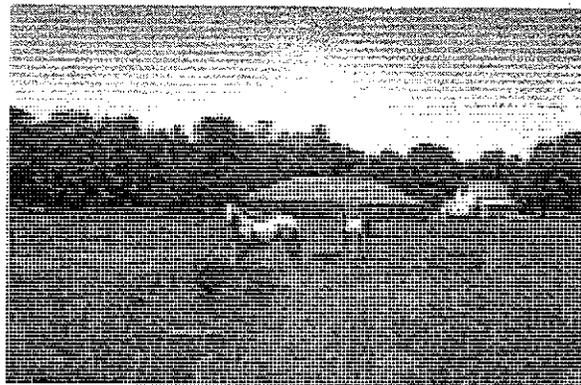
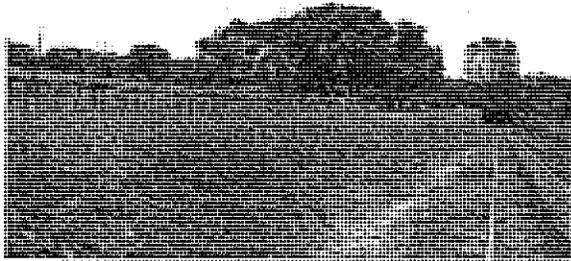
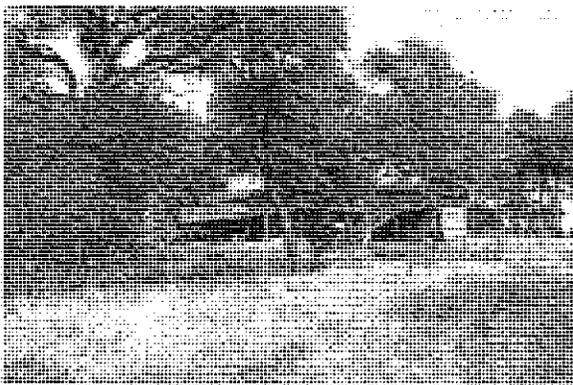


Figure 5



Vineyards adjacent to the corridor near Latrobe.

View of elevation change from corridor, near Sugarloaf.



As the corridor approaches Shingle Springs, the frequency and proximity of nearby homes increases.

Figure 6



As the corridor sweeps through the Barnett Ranch and Milton Ranch subdivisions, setbacks diminish.

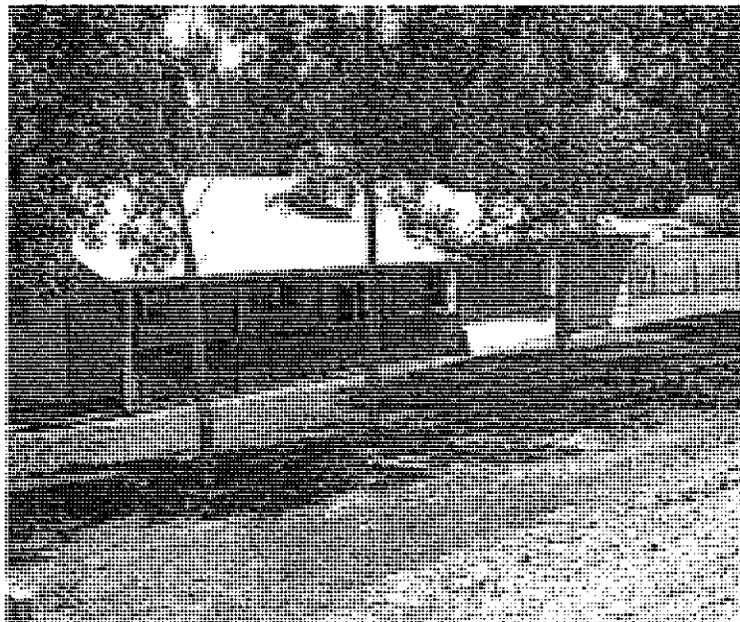


Figure 7

Historic railroad depot in Shingle Springs along Mother Lode Drive.



Adjacent uses parallel to Mother Lode Dr. are mixed, including homes, commercial and industrial buildings, and churches.

An example of adjacent industrial property.

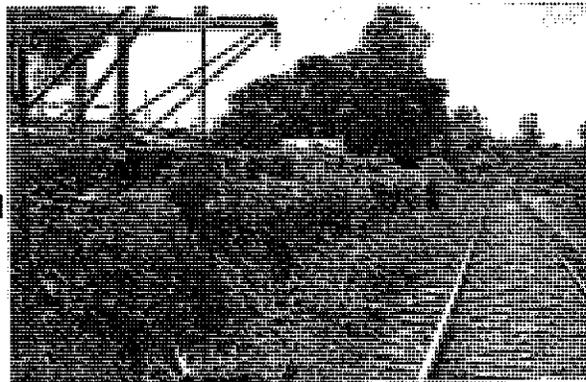
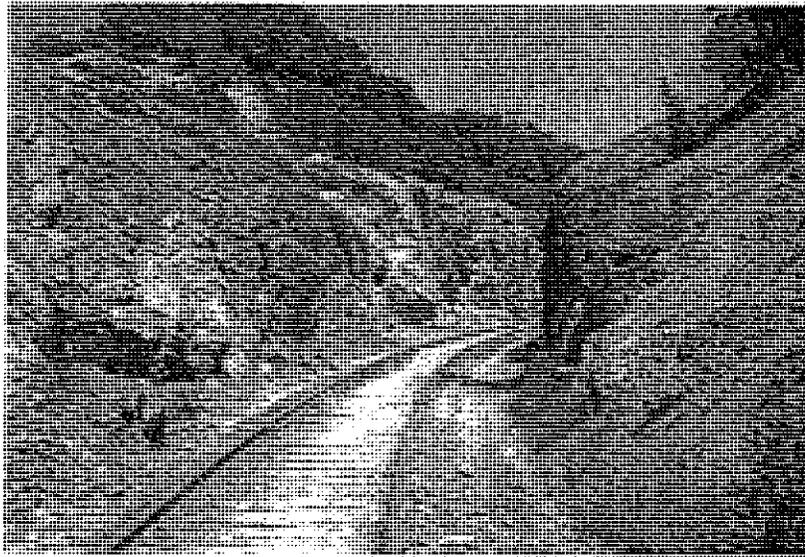


Figure 8



Above: One of the many cuts through hard rock. In these segments, parallel pathways would be above, along the access "roads" that were cleared when the railroad was constructed.

Below: Siding just west of Missouri Flat Rd.

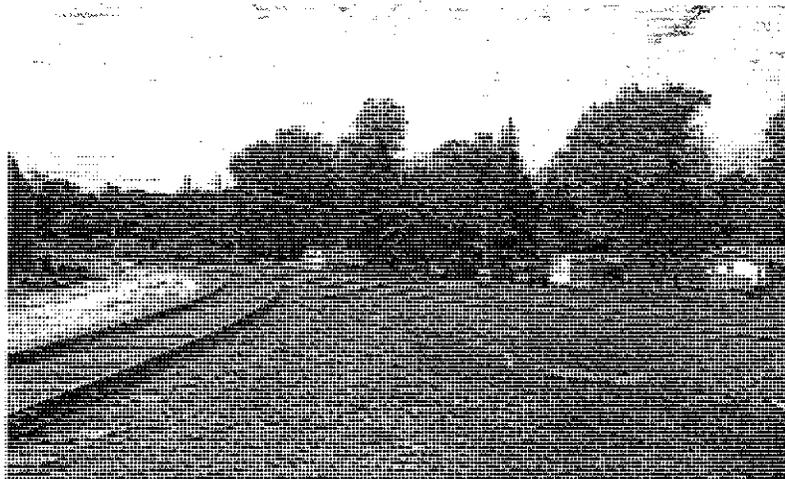


Figure 9

The corridor varies in width throughout. The potential for a heavy brush filled corridor is kept open with routine maintenance.



Most of the tracks from Apex to Missouri Flat Road were removed by Southern Pacific many years ago. In the middle of the photo is a historic berm.

View looking east across the deck of the bridge over Weber Creek. The bridge deck would require retrofitting to allow pedestrian and equestrian uses.

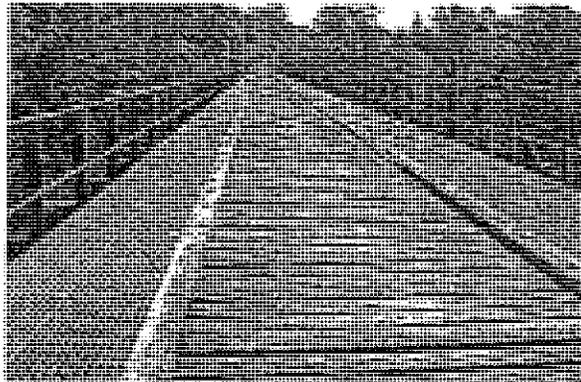
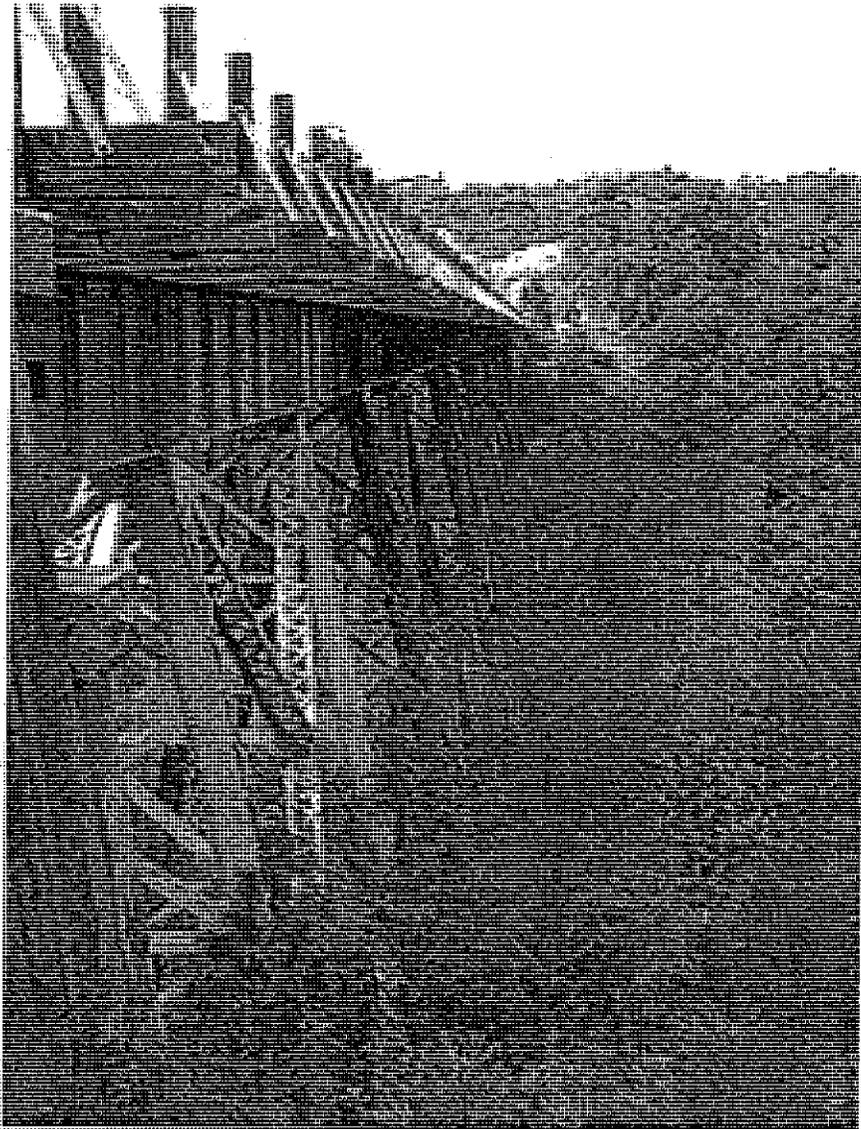


Figure 10



Bridge over Weber Creek.

Figure 11

Condition of Tracks, Crossings and Facilities

Teams of planners and engineers have conducted comprehensive field studies of the railroad including: ballast, ties, rails, switches, track, hardware, bridges, trestles, road crossing systems, and other facilities.

Despite the fact that the railroad has not been used since the last freight train ran on March 7, 1989, the condition of the tracks, crossings and facilities is relatively good. Some segments, especially the western portion between the Sacramento County line and Shingle Springs are in surprisingly good condition. However, isolated portions of the railroad require reconstruction due to the impacts from wild fires, storm drainage, and projects at road crossings.

In contrast, the rail corridor between Diamond Springs and Placerville is in very poor condition. During the summer of 1991, the rail was completely removed. Although the general grade of the corridor remains as originally constructed, a large portion of the ballast has been removed.

As with any asset, the corridor is in need of repair and an ongoing maintenance program. In addition to the natural decay of the corridor over time, vandalism, theft, illegal dumping of garbage and refuse, and fire are also major concerns.

C. Development of Master Plan

The Master Plan was developed in a cooperative process, over a two-year period, with two distinct groups of varying preferences:

- A Community Advisory Committee, including area residents, owners of property along or near the corridor, advocacy groups that support one or more use concepts, and other area residents; and
- A Steering Committee of El Dorado County and other local agency representatives.

In addition to working closely with these two committees, several additional public outreach programs were utilized from the inception to maximize public input and awareness.

Community Advisory Committee

Individuals that expressed interest were invited to serve on a Community Advisory Committee which was formed to advise project staff on a more-frequent basis than could be accomplished through large community meetings. The Community Advisory Committee consisted of ten (10) persons representing trails advocacy groups, excursion rail advocacy groups, and owners of property adjacent to the corridor.

Steering Committee

Development of the Master Plan was also guided by a Steering Committee which includes representatives from several El Dorado County departments, staff representatives from other local agencies in El Dorado County, and staff representatives from other members of the Sacramento-Placerville Transportation Corridor Joint Powers Authority.

El Dorado County Departments that were involved in the Steering Committee are:

- The ***El Dorado County Department of General Services*** which has two divisions with areas of responsibility with respect to the Master Plan. The Department of General Services is responsible for managing real property on behalf of the County, including easements and leases on the El Dorado County segment of the right-of-way. The Department of General Services includes the Parks and Recreation division which is responsible for developing a system of trails throughout El Dorado County.
- The ***El Dorado County Department of Transportation*** which is primarily responsible for constructing and maintaining the County road system. The Department of Transportation is also responsible for development services, with the Departments of Building and Planning.
- The ***El Dorado County Planning Department*** which is responsible for short- and long-range planning and land use regulation for the unincorporated areas of the County. Its responsibilities include ensuring compatibility of land uses with the use of the corridor.
- The ***El Dorado County Department of Risk Management*** which is responsible for minimizing the financial exposure and liability of the County.
- The ***El Dorado County Sheriff's Department*** which is responsible for law enforcement in the unincorporated area, including the corridor.
- The ***El Dorado Chief Administrative Office*** which is responsible for advising the Board of Supervisors on policy issues, particularly as they relate to financial matters and expenditures from the County's General Fund.
- The ***El Dorado County Counsel's Office*** which is responsible for representing the County on legal matters and advising the Board of Supervisors and County departments accordingly.

Other members of the Steering Committee are staff representatives from the City of Folsom, the El Dorado County Transit Authority, the City of Placerville, the El Dorado Hills Community Services District, the California Department of Transportation, the County of Sacramento, the Sacramento Area Council of Governments, and the Sacramento Regional Transit District.

Additional Community Outreach Programs

- **Community meetings.** Five (5) community meetings were held prior to the release of the Draft Master Plan and Draft Environmental Impact Report. The purpose of the initial meetings was to identify the preferences and concerns of community members, as well as other issues that needed to be addressed during the planning process. Later meetings were used to solicit feedback on alternative concepts for corridor use. Each of these meetings were well-noticed in local newspapers and direct mailers were sent to owners of properties adjacent to the corridor, previous meeting attendees, and other interested individuals.
- **Direct-mail and telephone surveys** were conducted to further solicit input from county residents. Surveys were mailed to owners of record for each parcel adjacent to the corridor. Random telephone surveys were conducted of registered voters in each Supervisorial district.
- **Small group “coffees.”** Nine (9) “coffees” (meetings in the homes of interested citizens) were held. Generally, a coffee consisted of 8 to 10 citizens from a geographic sub-region of the corridor where specific concerns could be dealt with in more depth than was possible in large, community meetings. These meetings provided an in-depth view of the corridor from a specific perspective.

II. GUIDING PRINCIPLES

From the early community meetings, a set of “guiding principles” was developed for the preparation of the Master Plan. Consideration of these principles is reflected in the planning process and in the resultant Master Plan. Adherence to these principles has been maintained to the maximum extent possible.

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- Private enterprises must pay for all of their associated costs and contribute additional funding for other corridor-related activities, such as policing and vegetation control.

III. PLANNED USES

During the planning process, the corridor was subdivided into several segments. Initially, four segments were defined. Each segment represents an area that is geographically similar in nature. The definition of segments was extremely useful in developing the overall concept from which the October 23, 1998 Draft Master Plan was produced. On May 25, 2000 and October 24, 2002, the Planning Commission, citing a need to maintain continuity of uses along the entire length of the corridor, modified the Master Plan to allow for the consideration of all interim uses in addition to recognizing that rail use would also be considered.

IV. ENVIRONMENTAL PROTECTION AND ENHANCEMENT

The strategies to protect and enhance the corridor environment are an important and inseparable part of this Master Plan. Although many of the measures in this section are similar to mitigation measures traditionally identified in most Environmental Impact Reports, the measures described in this section are as much a part of the Master Plan as those uses identified in Section III.

A. General Strategies (applicable to all uses)

Most of the strategies are applicable to any of the uses identified herein. Following this section are some additional strategies that are applicable to specific uses in the Master Plan.

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Fencing and Landscaping

There are many purposes of fencing. Several types of fences are available, providing an opportunity to choose from those that best enhance an individual location.

- Fencing will be used to create a positive barrier between parallel rail and trail uses;
- Fencing will be used to provide visual screening near sensitive receptors, e.g. homes and schools.

Specific types of fencing will be determined during subsequent, project-specific proposals and project-specific environmental documents.

Landscaping will consist of trees, shrubs, and other flora, native to the area. Landscaping will be used to:

- add aesthetic value to the corridor; and,
- to offset the visual impact of fencing.

Specific types of landscaping will be determined during subsequent, project-specific proposals and project-specific environmental documents.

Signing

Several types of signs will be used to properly implement uses of the corridor. Signs will serve many purposes:

- identify permitted uses, regulations, and penalties for unsafe and unlawful uses;
- identify potential hazards or unsafe conditions;
- identify proper etiquette for shared uses;
- provide directions and information regarding historic landmarks and destinations; and
- control opposing and cross traffic.

Maintenance, Vegetation Control and Other Fire Prevention/Control Actions

Maintenance includes those activities necessary to preserve the value of the corridor and the infrastructure. This includes those activities related to maintaining proper drainage. Maintaining assets directly related to private ventures will be

required of, and paid for by, the applicable private enterprise. Other maintenance will be performed by the County on a routine basis. In addition to preventative maintenance, this also includes consistent removal of trash, debris, and other refuse.

Vegetation within the corridor will be properly maintained in order to protect the integrity of trail and rail infrastructure, and to ensure that activities (or inactivity) on the corridor do not contribute to wildfires. With vegetation properly controlled, the corridor will serve as a "fire break" for fires that are in the immediate vicinity of the corridor.

Staging Areas

Staging areas will be at appropriate locations to facilitate access to the corridor, while minimizing disruption to sensitive land uses.

Specific staging areas will be identified as part of subsequent, project-specific proposals and project-specific environmental documents, in part because possible staging area locations could require the purchase of additional rights-of-way.

Safety/Enforcement of Proper Uses

It is a priority to ensure that the corridor is used properly. To ensure proper use, the County will:

- adopt local ordinances, consistent with this Master Plan, that define lawful uses and penalties for unlawful use;
- actively police the corridor using pedestrian, equestrian and motorcycle patrols; and,
- install bollards and gated fences at access points to keep motorized vehicles out; removable bollards and restricted-access gates will allow access for maintenance and emergency vehicles.

Institutional Arrangements and Policies

The El Dorado County Department of General Services has been designated as the lead Department responsible for management of the corridor. Several types of institutional arrangements will be implemented.

- A permit system will be developed to control and standardize the requirements for permitted use.
- A system will be developed by the County, and the Sacramento-Placerville Transportation Corridor Joint Powers Agency, to allow private individuals to propose projects consistent with the adopted Master Plan.

- Establishment of additional policies, such as to automatically re-evaluate proposed excursion rail uses after 10 years where such systems have not yet been implemented, particularly where a designation allowing excursion rail in the Master Plan is precluding another use which is more immediately feasible.

Potential, Future Reinstatement of Active Rail Service

A condition of the corridor acquisition by the SPTC-JPA is that the corridor be preserved for the potential, future reactivation of rail service. This provides for the protection of the corridor under Federal law. Any public agency or private entity wishing to reinstate freight or passenger rail service would be required to prepare a business plan that is consistent with the SPTC-JPA agreements such as the Sale Agreement (Placerville Branch) and the Reciprocal Use & Funding Agreement establishing the terms for future rail operations along the corridor. The process would begin with the review of the business plan with the SPTC-JPA for their consideration.

Use of Public Funds

Uses of the corridor for private enterprise (e.g. utility easements and excursion trains) will not be subsidized with taxpayer funds. Development of trails will be funded through private funds, or special public grants that are available for the development of trails but restricted from being used for lifeline transportation projects such as developing or maintaining roads, or maintaining and operating public transit services.

B. Specific Strategies

Paved Trail -- Telephones and/or Emergency Call Boxes

Telephones and/or emergency call boxes will be considered for implementation, where feasible, along the most-urban sections of paved trails. At a minimum, these could be placed at staging areas. These could be cellular, and solar-powered to allow for easy installation.

V. DESIGN GUIDELINES

The purpose of this section is to suggest guidelines that will be used in the development of specific projects that are consistent with this Master Plan. These guidelines represent general standards, not absolutes. During the design and environmental review of individual projects, exceptions to these guidelines may be considered and granted. Justification for granting exceptions to these guidelines will be based upon the unique circumstances of individual projects. For example, the prototype for a staging area is intended to represent the general configuration for, and components of, a parking facility to serve one of several potential corridor uses rather than the specifications for constructing an actual staging area.

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Several existing policies and ordinances of El Dorado County will likely apply to the future use of the corridor. In addition, El Dorado County and the SPTC-JPA are expected to develop additional guidelines, standards, policies, procedures, ordinances, permits, standard agreements, fee schedules, and other requirements, as necessary to govern the development, maintenance, and operation of the corridor.

A. Guidelines for Corridor Uses

General Trail Guidelines

Three types of trails are envisioned for the corridor: natural or "hiking/bike" trails; improved trails; and, paved trails. This section describes some general guidelines for the development of all trails in the El Dorado County section of the Sacramento-Placerville Transportation Corridor. Additional guidelines specific to the development of each trail type are identified in the respective sections below.

1. Trails will be open from dawn to dusk. Gates will be unlocked at dawn and locked at dusk by agents of El Dorado County.
2. Figure 12 identifies alternative configurations for road crossings. The design of individual road crossings should consider these alternatives in light of traffic volumes, and vertical and horizontal sight distance.
3. Figure 13 identifies additional guidelines for all trails that are adjacent, and above, channels, such as trails that may be constructed on banks above channels that were cut to maintain the continuous railroad grade.
4. To the extent possible, design all improved and paved (walking) trails facilities in accordance with the American With Disabilities Act (ADA) criteria.

Additional Natural Trail Guidelines

Figure 14 identifies a standard for developed, natural trails. As conditions allow, interim use of the corridor for trail purposes may be allowed, consistent with this plan, without these types of improvements. However, ultimate development of a natural trail is intended to conform to the guidelines to ensure safety and proper drainage. It is anticipated that natural trails would be developed first in anticipation of additional funding to develop an improved or paved trail system.

Additional Improved Trail Guidelines

Figure 15 identifies a standard for improved trails.

Additional Paved Trail Guidelines

Figure 16 identifies a standard for paved trails.

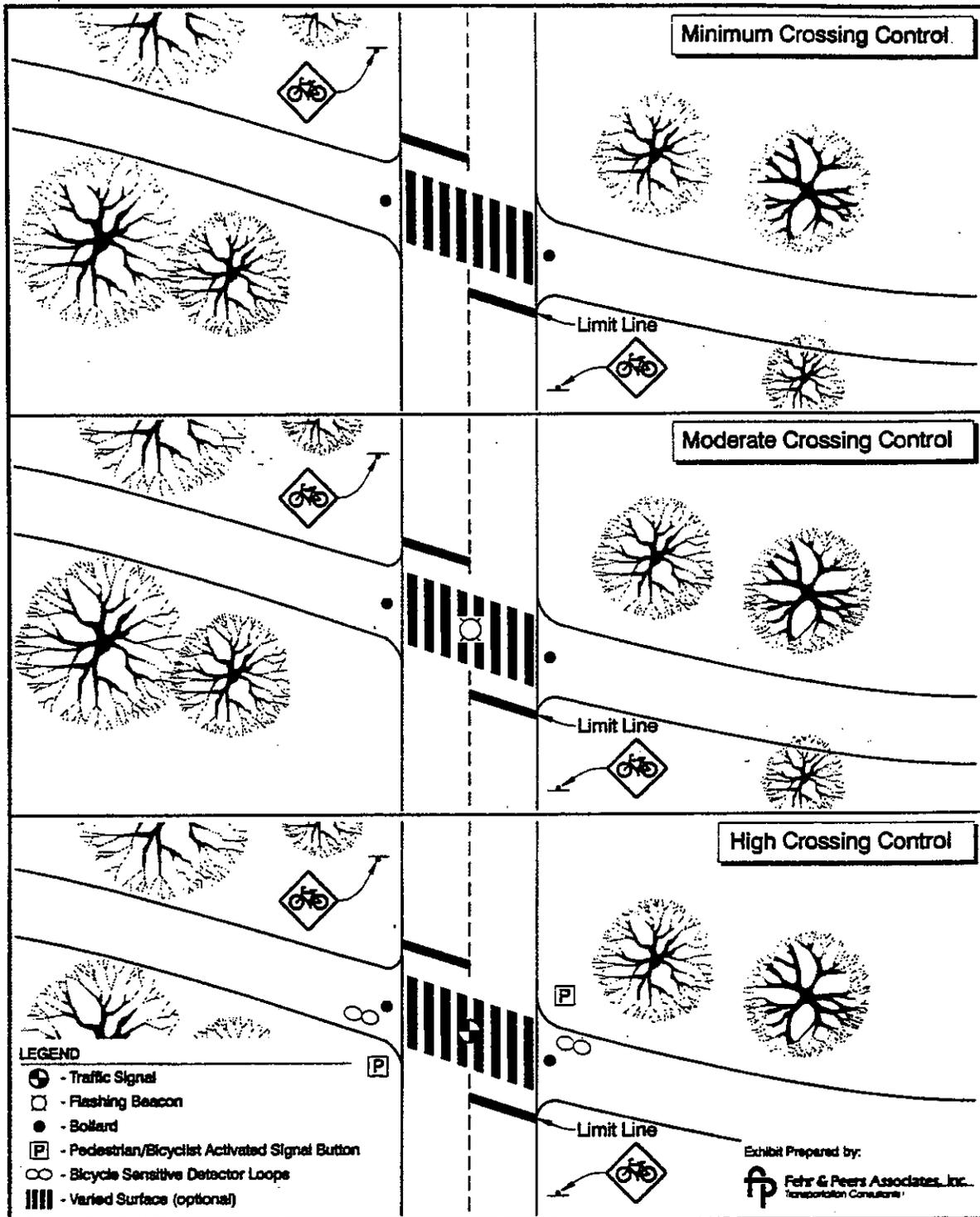
Additional Guidelines for Parallel Trails

In some areas, two, parallel trails are planned as a way of separating potential users (e.g. bicyclists and horse-back riders) to maximize safety and enjoyment. Figure 17 identifies a standard for parallel trails.

Excursion Rail Guidelines

State and Federal regulations provide strict requirements for the operation of rail services. Nothing in this Master Plan is intended to conflict with those requirements. Rather, this Master Plan is intended to provide for additional, local requirements.

Operation of excursion trains will be limited to daylight hours, subject to seasonal variation, but not earlier than 8:00 a.m., or later than 8:00 p.m. Service will be limited to 2 round-trips per day, and will be limited to weekends and holidays or as permitted during special events. Accessory and appurtenant facilities with a proposed excursion rail project shall not reduce the utility of the corridor for multiple use and shall accommodate trail usage into the design of the project.



MAP DOES NOT IMPLY GEOMETRIC CONFIGURATION

Figure 12

Design Considerations For At Grade Crossing Prototypes

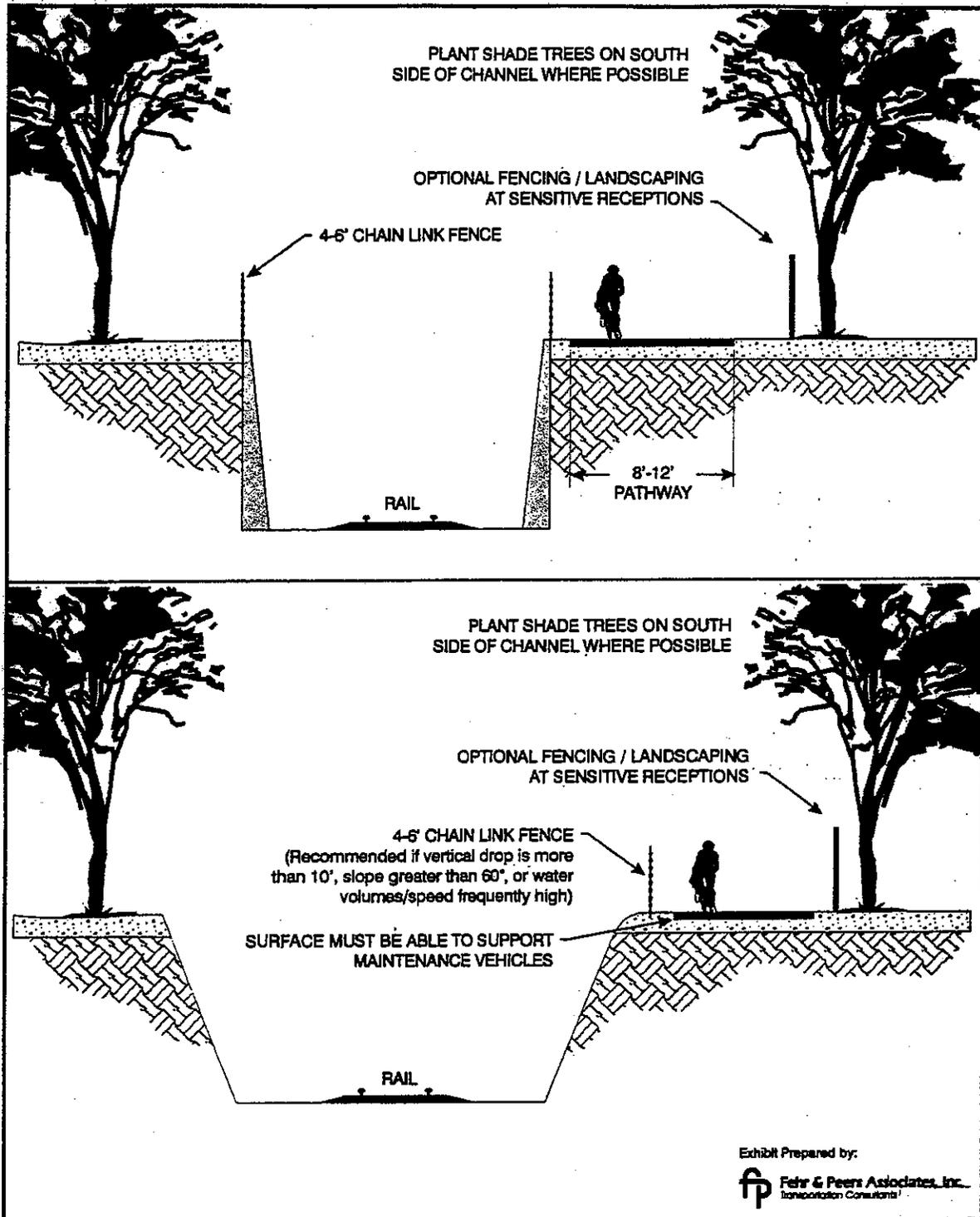


Figure 13

Guidelines For Trails Adjacent To Channels

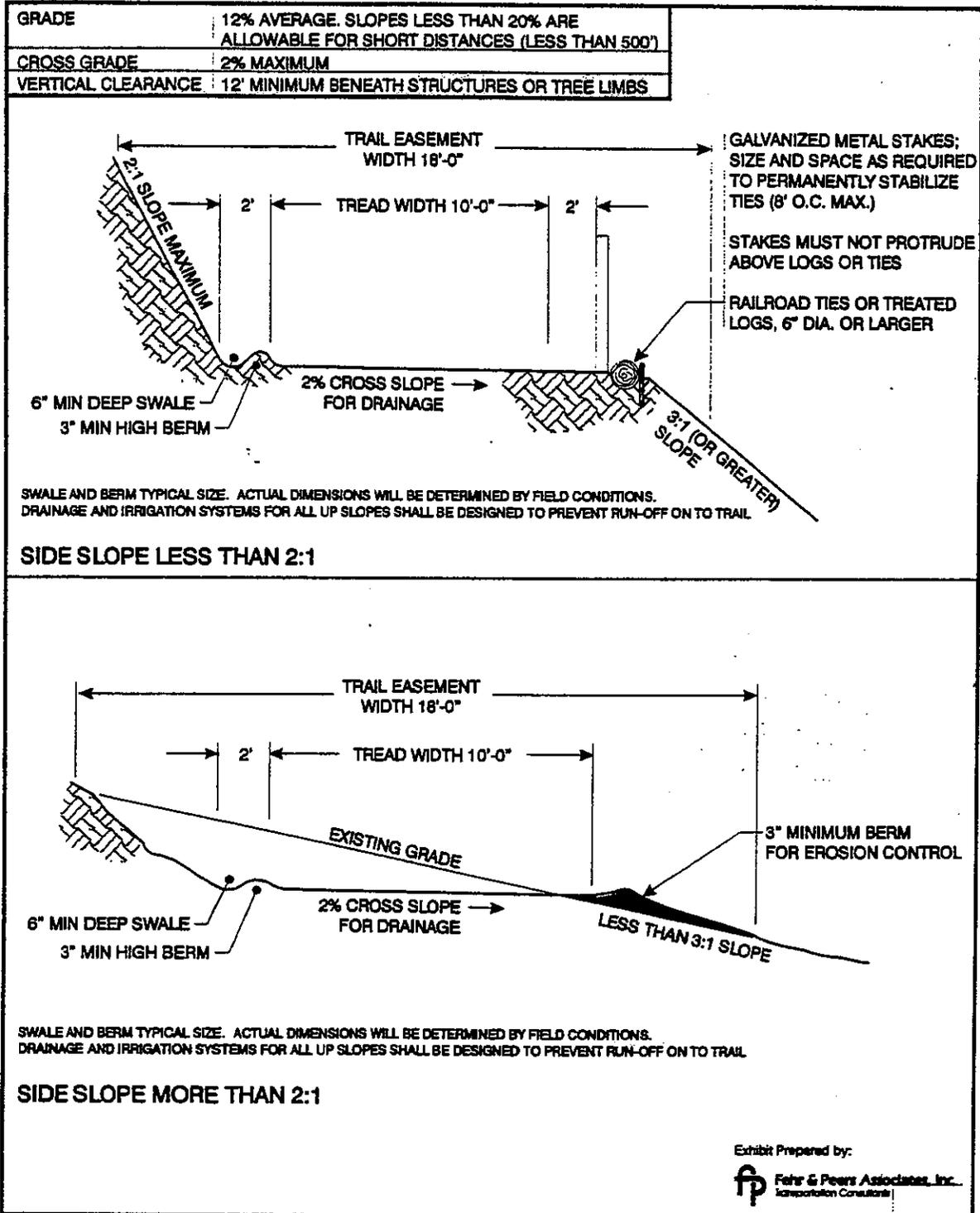


Figure 14

Natural Trail Standards

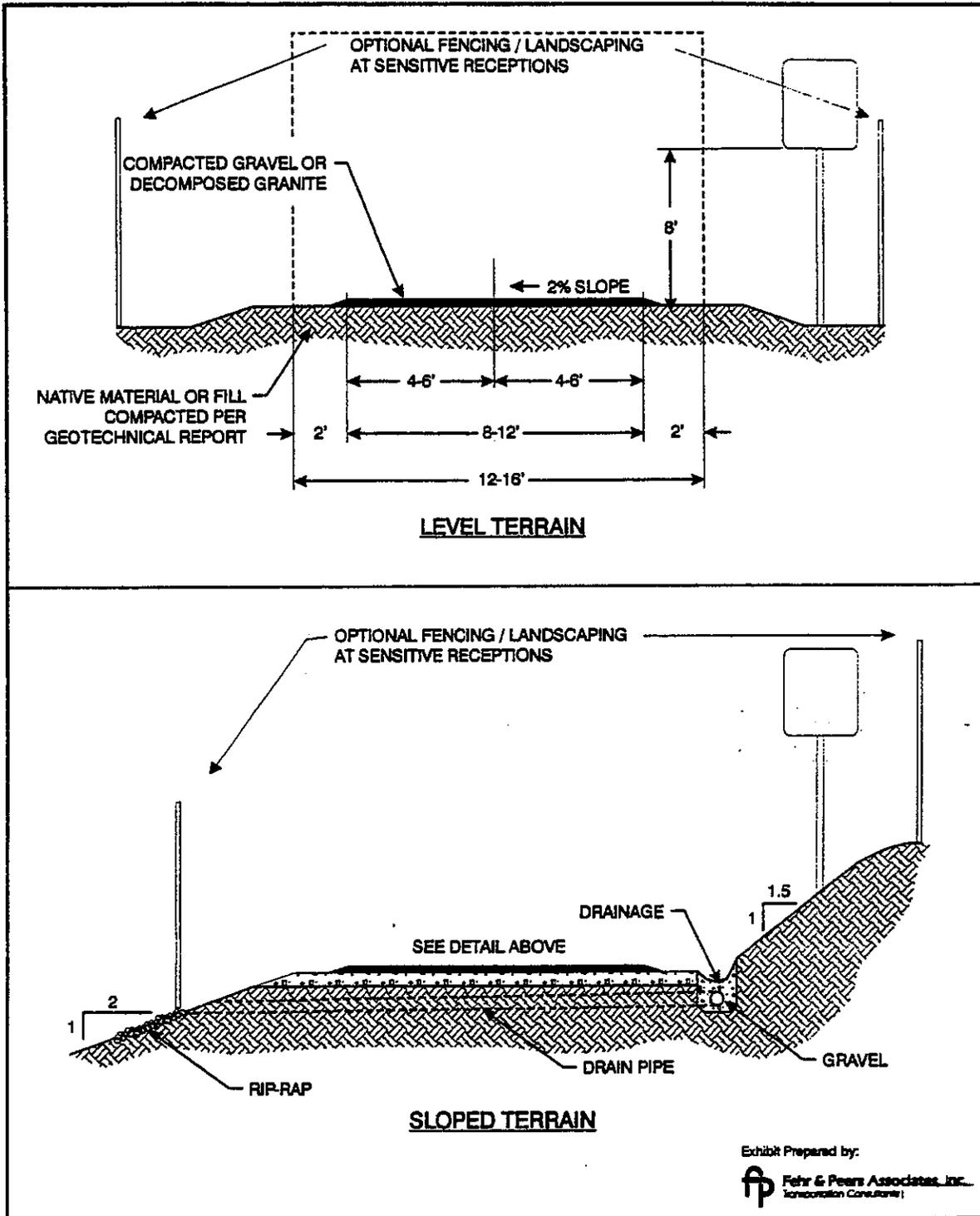


Figure 15

Typical Cross Section: Improved Trail

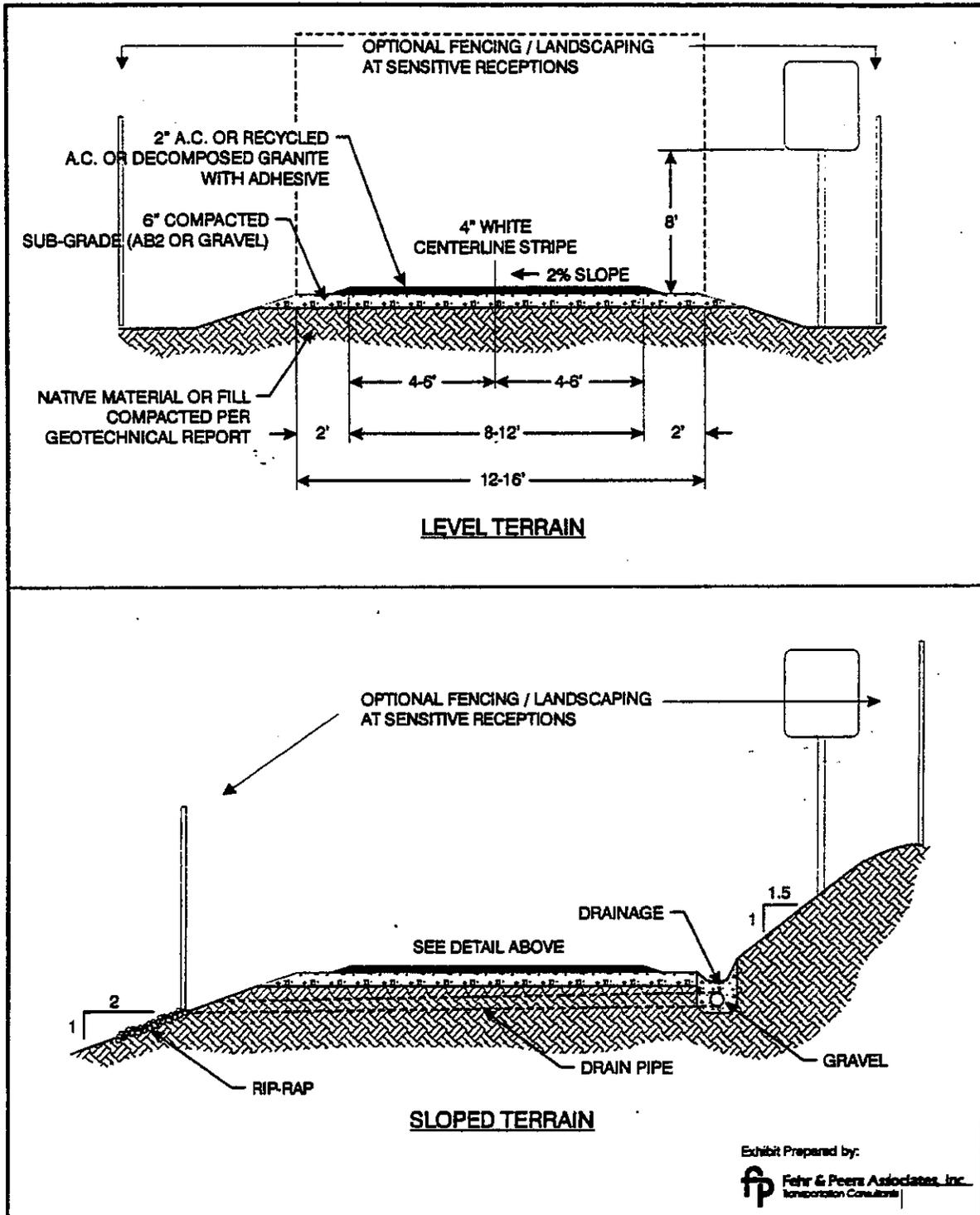


Figure 16

Typical Cross Section: Paved Trail

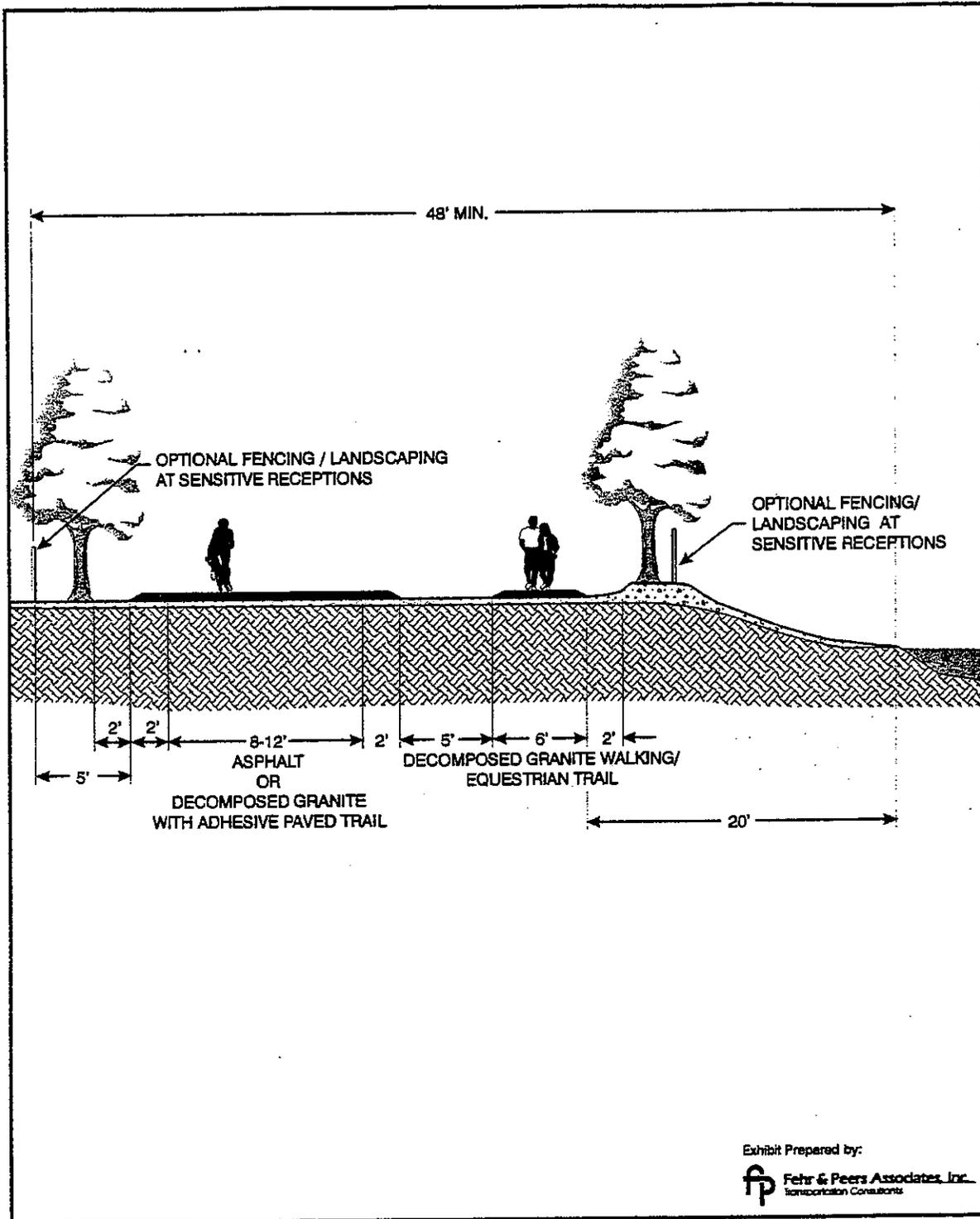


Figure 17

Typical Cross Section: Parallel Trails

Because of potential impacts and the number of considerations, the provision of excursion rail services is anticipated to require additional guidelines and regulations.

At a minimum, proposals to develop excursion rail projects will require:

- operational agreements between the private enterprise, El Dorado County, and the SPTC-JPA to avoid conflicts with other rail users and to ensure compliance with the provisions of the Reciprocal Use and Funding Agreement and operating guidelines; and,
- franchise agreements between El Dorado County and the private sponsor which are expected to include, but not be limited to the following:
 - demonstration of adequate financial and other resources to maintain and operate pursuant to the franchise agreement;
 - terms for compliance with applicable local, State, and Federal laws and regulations;
 - terms for ensuring that all necessary permits will be obtained and renewed as needed;
 - terms for payment of all necessary capital, maintenance, and operational costs;
 - terms for payment of franchise fees in addition to capital, maintenance, and operational costs; and,
 - requirements for provision of insurance.

Both El Dorado County and the Sacramento-Placerville Transportation Corridor Joint Powers Authority are expected to also impose additional administrative requirements.

Guidelines for Excursion Rail Projects Parallel to Trail Projects

Where trail and excursion rail uses are planned for joint use, terrain and available right-of-way width may pose design challenges. While the corridor width may vary from 66 to 200 feet, the corridor section may be within a narrow cut or on a fill section making adequate separation of uses difficult to achieve. Figure 18 identifies a standard for these sections, in order to maximize safety and enjoyment.

Personal Rail Cars

Use of personal rail cars on the corridor will be subject to such permits, regulations, and fees imposed by El Dorado County and the Sacramento-Placerville Transportation Corridor Joint Powers Authority.

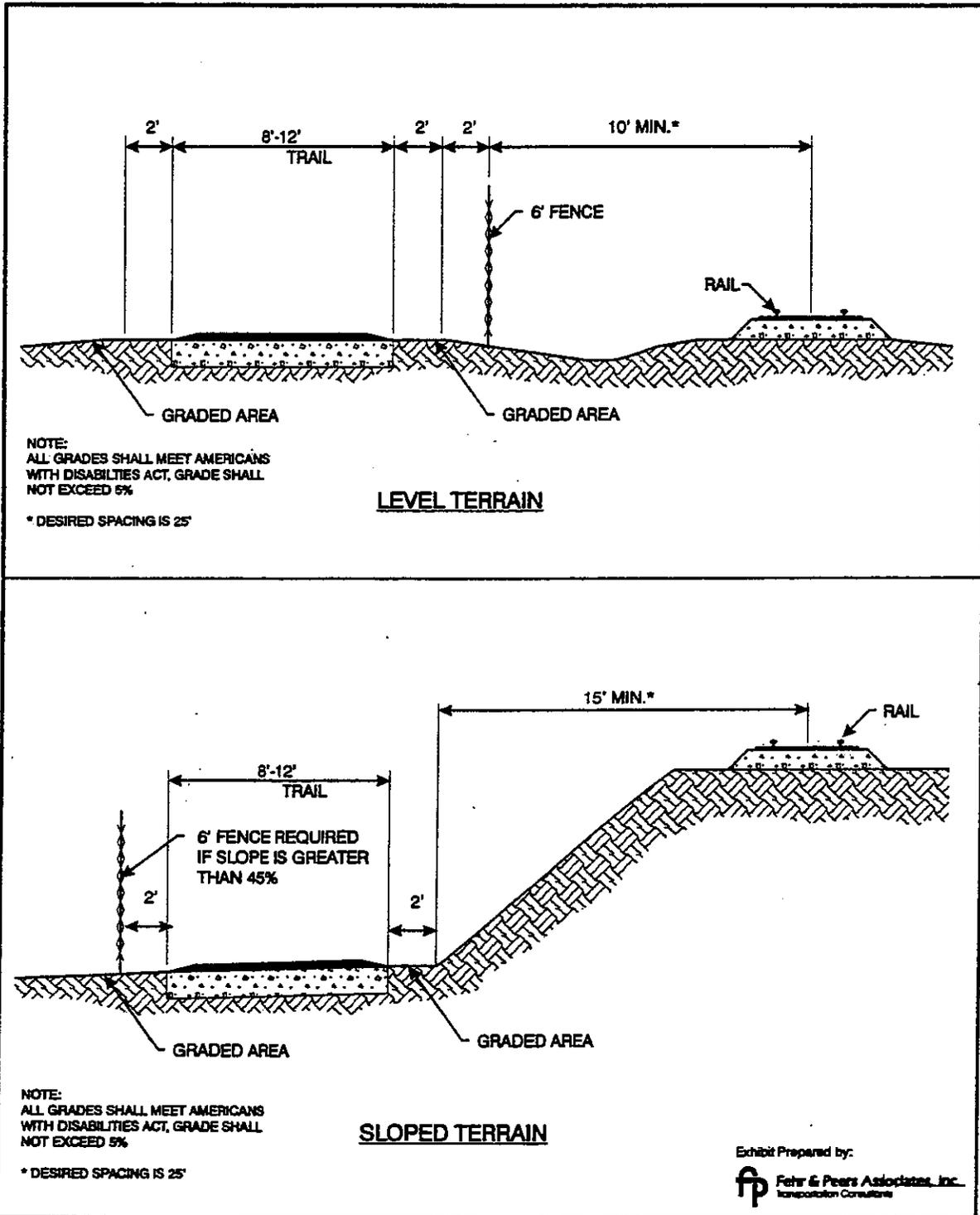


Figure 18

Standards For Trails Parallel To Excursion Rail Service

Underground Utility Easements

Allowance for underground utility easements along and/or across the corridor will be subject to such permits and regulations imposed by El Dorado County and the Sacramento-Placerville Transportation Corridor Joint Powers Authority. It is expected that easements will be subject to the annual payment of fees, commensurate with the type of use and the total area.

Leases

The County administers approximately 79 leases within the corridor. To insure compatibility with the Master Plan and provide for fair compensation to the County, the following actions will be undertaken:

- conduct an annual review of all leases including fee appraisals, if necessary and make adjustments to lease payments based on market value;
- standardize lease agreements for improved administration, monitoring, and protection of corridor integrity;
- monies collected shall be placed into a special revenue fund to pay for corridor maintenance and eligible activities.
- existing and proposed leases shall be reviewed to determine if activities authorized by the lease may have an adverse impact on cultural resources or impede corridor use for proposed transportation or recreational uses.

B. Guidelines for Environmental Protection and Enhancement Strategies

Fencing and Landscaping

Fencing provided in whole or in part for safety reasons will be designed and constructed with maximum consideration to standards shown above for rail and trail projects. Other types of fencing intended for aesthetic reasons will give consideration to the natural surrounding.

Landscaping will consist of trees, shrubs, and other flora native to the area. Maximum consideration will be given to those plants that are most-drought resistant, and that require the least amount of maintenance.

Signing

Signs will follow adopted local, State, and Federal requirements. Additional signage will be included along trails in the corridor, generally consistent with Figure 19.

Additional, interpretive trail signs may be included in project designs to enhance the experience for users.

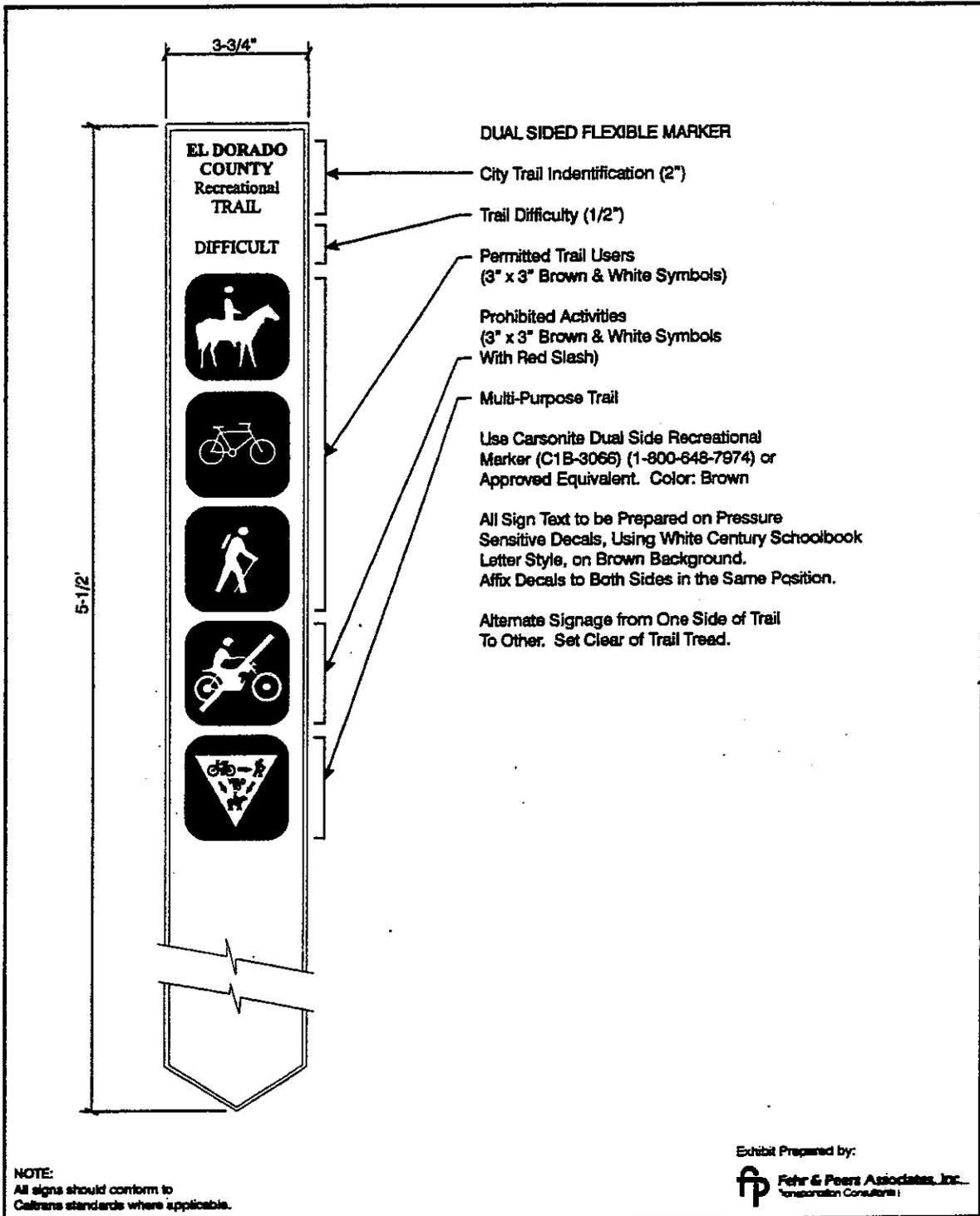


Figure 19

Typical Signage

Staging Areas

Although no specific locations are proposed for staging areas, pending the planning and design of a specific project, there are many potential staging area locations because of previous rail activities. Most of these are in areas designed for uses other than residential. El Dorado County controls several large parcels of land within the corridor that might be suitable as staging areas. The El Dorado County Trails Advisory Committee has conducted an evaluation of potential staging areas focusing primarily on corridor crossings at major roads. The Committee evaluated eighteen sites, six of which were considered preferable. The results of that effort are contained in Appendix B.

Failure to provide staging areas is unlikely to deter the most-determined users, and could result in unsafe conditions at road crossings and other access points. However, since a significant length of the corridor is very rural, any staging area must give full consideration to zoning ordinances and the empirical compatibility with adjacent properties.

Figure 20 identifies a prototype for the design of staging areas.

Telephones and/or Emergency Call Boxes

Telephones and emergency call boxes should be considered along the most-urban portions of paved trails. There are no known State or Federal design standards for trail side call boxes or telephones, so the design should be able to consider the surrounding environment. However, call boxes should only be placed in areas easily accessible to emergency response personnel.

Examples of call boxes are shown in Figure 21.

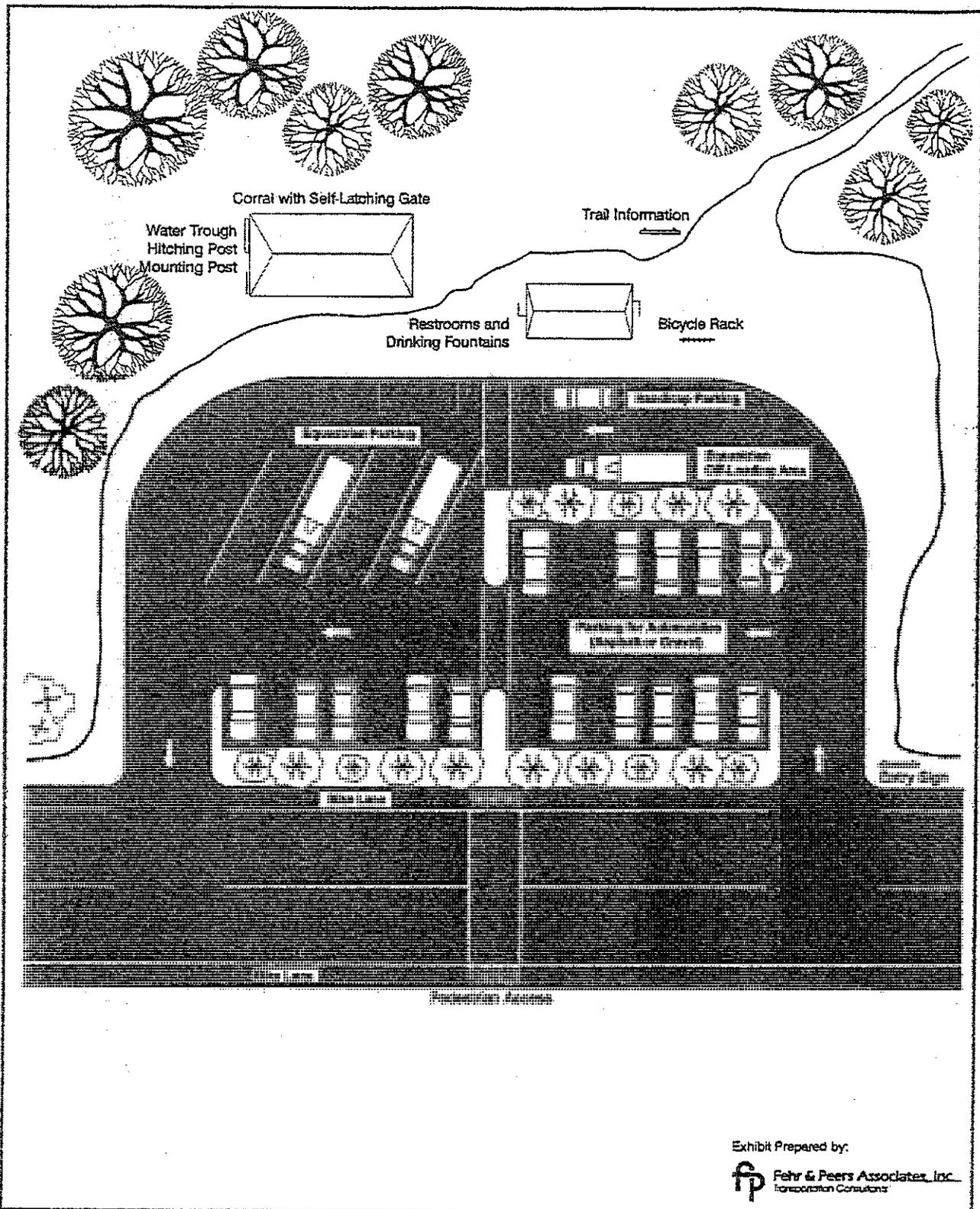


Exhibit Prepared by:
fp Fehr & Peers Associates, Inc.
Transportation Consultants

Figure 20

Staging Area Prototype

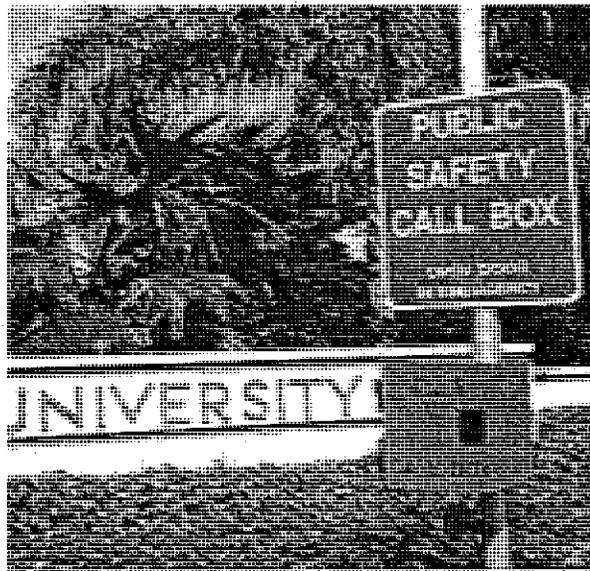
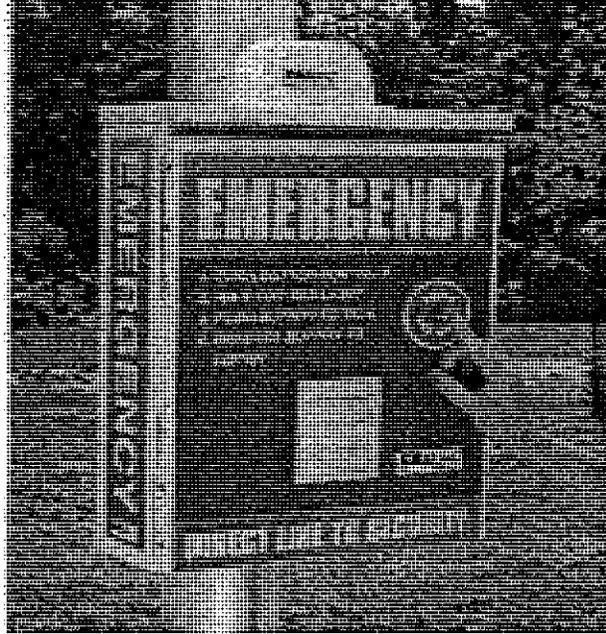


Figure 21

Sample Call Box Designs

VI. GUIDELINES FOR DEVELOPMENT ADJACENT TO THE CORRIDOR

All development proposals located adjacent to the corridor shall be reviewed to ensure consistency with the Master Plan. Developments shall be designed to minimize impacts to the corridor and ensure that the integrity and continuity of the corridor are not compromised. An optimum right-of-way width is 100 feet which may adequately accommodate all uses contemplated along the corridor. In some sections of the corridor, additional rights-of-way may be necessary to compensate for topographical constraints.

Residential Development

Any residential subdivision shall at a minimum provide for an irrevocable offer of dedication for trail easement 100 feet measured from centerline from the right-of-way. Additional non-building setbacks may be established as deemed appropriate as part of project approval to ensure sensitive uses would be located an adequate distance from the corridor. Additional requirements for fencing and landscaping may be imposed as determined appropriate for project approval.

Non-Residential Development

Any non-residential subdivision shall at a minimum provide for an irrevocable offer of dedication for trail easement 100 feet measured from centerline of the right-of-way. Fencing and landscaping would be imposed as determined appropriate for project approval.

VII. PLAN IMPLEMENTATION AND PHASING

Like most plans, this document does not establish priorities or a specific schedule for project implementation. Appropriate phasing will be considered during the review of a proposed project.

Projects will be developed as useable segments. That is, the result of each project should be useable and independent from the need for future projects. Moreover, projects should be proposed with thought given to connectivity, continuity, and consistency with existing projects.

The timing for proposing and implementing each specific project will be dependent upon several factors, including one or more of the following:

- available funding for design and implementation;
- available funding for operation and maintenance;
- completion of project-level environmental documentation and the identification and implementation of appropriate mitigation (if any);

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- available funding for design and implementation;
- available funding for operation and maintenance;
- completion of project-level environmental documentation and the identification and implementation of appropriate mitigation (if any);

- development of necessary policies and procedures;
- acquisition of additional right-of-way, if needed.

Since this plan allows for public infrastructure projects and private enterprises, the steps to implement one type will be somewhat different from the other.

The immediate integrity of the corridor should be addressed through the preparation of a maintenance plan to address present problems of trespass and unauthorized use and encroachments into the corridor, illegal dumping of garbage and refuse, theft of rail equipment and artifacts, weed abatement and fire hazard reduction, drainage facilities and erosion control, and the deterioration of historical structures.

Figure 22 compares the general steps that will be undertaken to develop public projects and private projects

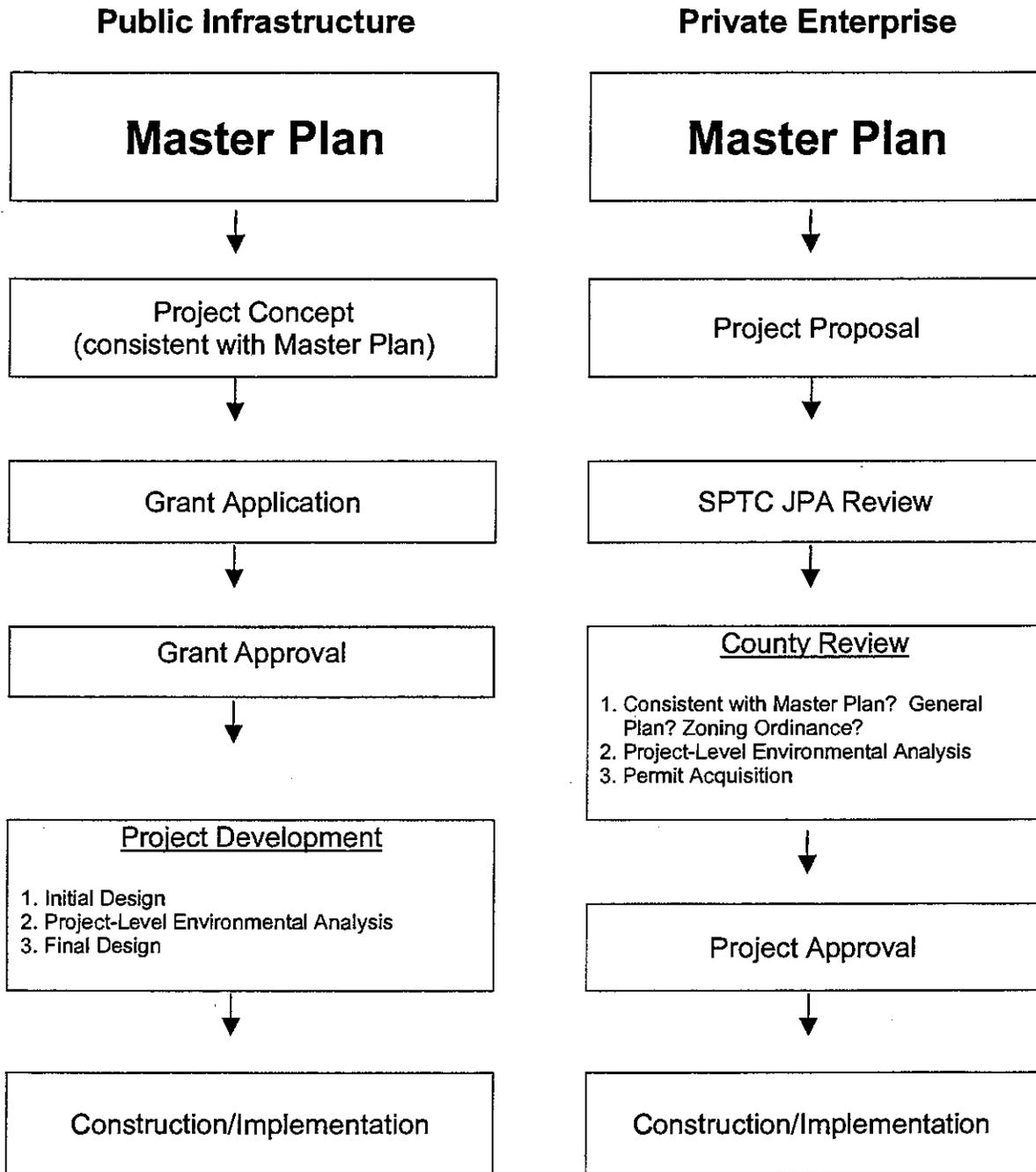


Figure 22

Project Approval Process

Appendix A - Sources

Draft Phase II Site Assessment Report for Southern Pacific Railroad Right-of-Way Milepost 119.4 to Milepost 147.6 El Dorado County, California. Prepared for SPTC-JPA. Geocon Environmental Consultants, February 1996.

El Dorado County General Plan: Volume I, Goals, Objectives and Policies. El Dorado County Planning Department, January 1996.

El Dorado County General Plan: Volume 2, Background Information. El Dorado County Planning Department, January 1996.

El Dorado County General Plan: Volume 3, Environmental Impact Report. El Dorado County Planning Department, January 1996.

El Dorado County Hiking & Equestrian Trails Master Plan. Park & Recreation Division, Community Development Department, April 1989.

Initial Study/Negative Declaration El Dorado County Southern Pacific Right-of-Way Acquisition Project Apex to Diamond Springs and Diamond Springs to El Dorado County/Sacramento County Line. Jones & Stokes Associates, Inc., March 1991.

Land Use Opportunity Study Southern Pacific/Placerville-Camino & Lake Tahoe Railroad Abandonment. The Planning Group, October 3, 1986.

Master Plan for Former Southern Pacific Right-of-Way Technical Memorandum #1 Existing Conditions, Plans, and Projects. Prepared for County of El Dorado. El Dorado County Transportation Commission, May 2, 1997.

Rails-with-Trails: Lessons Learned Literature Review, Current Practices, Conclusions. Alta Transportation Consulting, Draft dated December 10, 2001.

Reciprocal Use and Funding Agreement (Placerville Branch). Sacramento Placerville Transportation Corridor Joint Powers Authority, June 1996.

Sacramento Valley Railroad. Doug Nobel, 1994.

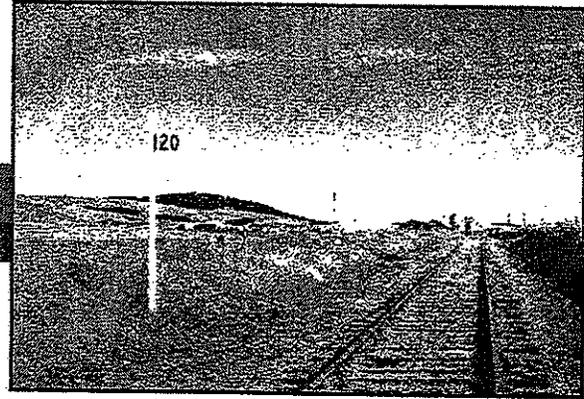
Appendix B - Trailhead/Trail Staging Areas

Sacramento Placerville Transportation Corridor-Road Crossing Information

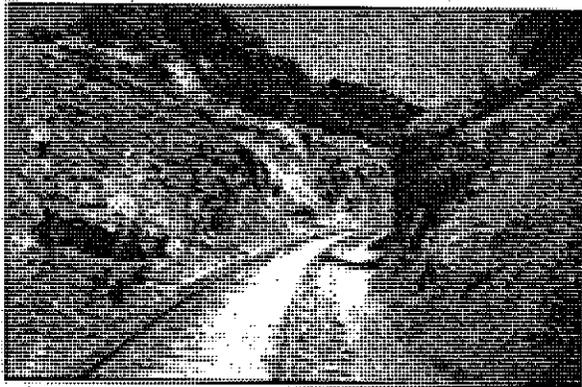
Site #	Crossing	Description	Mileage (approx.)
1	Missouri Flat Road	Trailhead on east side is a priority. Potential for over crossing of Missouri Flat.	25.5 *
2	Forni Road	Poor site distance along road.	24.5
3	Blanchard Road	Narrow roadway, high residential development.	24.3
4	Oriental Street	Good option for Trailhead. Shared use with utility easement. Close to El Dorado/historical area.	23.5 *
5	El Dorado Road	Little potential for access. Road safety issues.	23
6	Motherlode Drive	Little potential for access. Road safety issues, water crossing & wetlands.	22.5
7	Davidson Road	Little potential for access. Industrial issues.	22
8	Greenstone Road	Good site lines. Difficult topography.	21
9	Shingle Springs Drive	Next to church and school parking lot. Potential for shared use parking.	18.5
10	Motherlode Drive	Large area of public land. Good access. Difficult road crossing of Mother Lode.	18 *
11	South Shingle Road #1	Good sight lines. Small access area.	16.5
12	South Shingle Road #2	Great site: Close to existing arena, large parking lot, good sight lines.	12 *
13	Brandon Road	Currently blocked with vegetation. Far from main access.	10.5
14	South Shingle Road #3	Close to road. Track crosses road twice. Limited potential for development.	9
15	Memory Lane	Private area. Far from main access. Low value.	8.5
16	South Shingle Road #4	Site lines and topographic issues. Low value.	8
17	Latrobe Road	Good access. High vehicle speeds, crossing issues.	6.8 *
18	Sacramento/El Dorado County Line	Potential for park site near crossing of county line.	0*

*Areas preferable for Trailhead/Trail Staging Areas

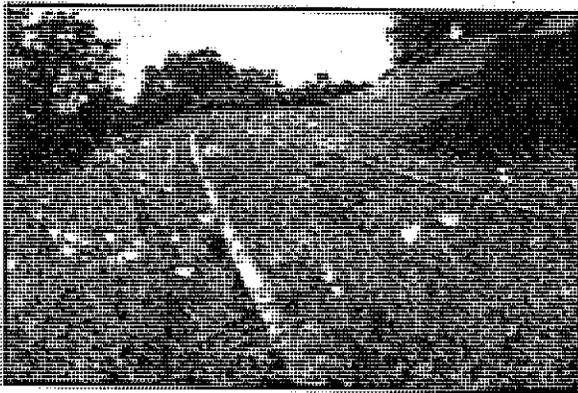
Appendix C



Mitigation Monitoring Program



Sacramento-Placerville Transportation Corridor Master Plan



Lead Agency:
County of El Dorado

*Environmental
Consultant:*

Jones & Stokes

April 2000

**Mitigation Monitoring Program for the
Sacramento-Placerville Transportation Corridor Master Plan**

Prepared for:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
Contact: Kris Payne
530/621-5900

Prepared by:

Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914
Contact: Richard Rust, AICP
916/737-3000

April 2000

This document should be cited as:

Jones & Stokes. 2000. Mitigation monitoring program for the Sacramento-Placerville transportation corridor master plan. April. (J&S 98-054.) Sacramento, CA. Prepared for El Dorado County Department of Transportation, Placerville, CA.

**Table 1. Sacramento-Placerville Transportation Corridor Master Plan Project
Mitigation Monitoring and Reporting Plan**

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
Geology				
GEO-1.1 Implement Short-Term Erosion Control To control erosion related to the removal of railroad infrastructure and ballast in Section B2, the County should maintain a minimum 3-inch layer of ballast in place or use native plantings to reduce erosion potential. Removal of ballast should be scheduled to occur outside the rainy season.	Once per project	County/Concurrent with construction	El Dorado County	_____
GEO-1.2 Conduct Long-Term Maintenance of Corridor Annually, before the start of the rainy season, the County shall inspect and repair cut slopes and off-trail use areas within the corridor. Repairs should be targeted at eliminating improper drainage and areas likely to form gullies during the rainy season.	Annually	County/Annually, before rainy season begins	El Dorado County	_____
Water Resources				
WR-1.1 Prepare Drainage Control Plan and Specifications During the design phase of each project, the applicant shall hire an expert to prepare the appropriate drainage control plan and specifications that satisfies El Dorado County standards. If applicable to the area included in the project, damaged or obstructed drainage crossings (i.e., culverts, pipes) that currently exist along the corridor shall be evaluated by the project engineer for capacity and adequacy to provide drainage flow control. Changes to the potential for flooding would be minimized through the engineered design of flow control structure repair and new construction. The design of new or repaired flow control structures will incorporate additional drainage arising from reduced infiltration following construction of new trail surfaces. Damaged or missing culverts and crossings would be replaced or repaired as necessary. All drainage flow control structures would provide adequate capacity to pass flood flows to natural drainages.	Once per project	Project applicant/ Before improvement plans are approved	El Dorado County	_____
WR-1.2 Exclusion of Structures from Flood Zones Staging areas and permanent or temporary structures (e.g., railroad stations, maintenance facilities, portable sanitation devices) that may be used by persons in the corridor would not be erected in the floodplains of streams.	Once per project	Project applicant/ Before improvement plans are approved	El Dorado County	_____

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
Transportation and Circulation				
<p>T-1.1 Prepare and Implement a Construction Management Plan The applicant shall prepare a construction management plan (CMP) during the final design stage of the project and implement it during the actual construction phase of the proposed Master Plan. The CMP shall include a comprehensive traffic/transportation plan that would include the following.</p> <ul style="list-style-type: none"> ■ Traffic Safety Plan. This plan would address the appropriate vehicle size and speed, travel routes, detour or lane closure plans, flagperson requirements, location of turnouts to be constructed, coordination with law enforcement and fire control agencies, emergency access to ensure public safety, and need for traffic and speed limit signs. ■ Road Improvement Plan. This plan would identify road segments, bridges, and culverts that need to be improved and turnout locations that need to be constructed to accommodate project construction, maintenance, and operational activities. The plan would also identify damage caused by construction vehicles that would need to be repaired. 	Once per project	Project applicant/ Before construction phase begins	El Dorado County	
<p>T-2.1 Prepare and Implement a Parking Assessment At the time of submittal of individual projects, the applicant shall prepare a parking management plan that assesses parking demand, assesses current parking availability, and provides plans for provision of adequate parking to meet the need for trails-related parking. The parking management plan shall be prepared under the guidance of the County's Department of Transportation. This mitigation measure applies to trails projects only.</p>	Once per project	Project applicant/At time of project application	El Dorado County	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
Biology				
<p>BIO-1.1 Conduct Additional Botanical and Wetland Resource Surveys and Studies The project proponent will retain appropriate resource personnel to conduct the following surveys and studies before design and construction of the proposed project:</p> <ul style="list-style-type: none"> ■ surveys and mapping of special-status plants during appropriate identification periods; ■ mapping and quantification of habitat loss; and ■ delineation and quantification of waters of the United States, including wetlands, using the Corps' 1987 wetland delineation manual (Environmental Laboratory 1987). 	Once per project	Project applicant/ Submit study at time of project application	El Dorado County	
<p>BIO-1.2 Retain an Environmental Monitor The project proponent will retain a qualified biologist to monitor construction activities in sensitive biological resource areas. The biologist must be familiar with all special-status plant and wildlife species, sensitive habitat resources in the project area, and have the DFG and USFWS permits to handle special-status wildlife species. The biologist will be responsible for:</p> <ul style="list-style-type: none"> ■ determining the placement of orange barrier fencing; ■ maintaining fences; ■ monitoring implementation of the conditions contained in state and federal permits to be obtained pertaining to protection of biological and wetland resources in the project area; ■ determining the location of temporary sedimentation barriers, such as sandbags or siltation fencing, that will be installed to minimize siltation into drainages; ■ removing any special-status wildlife that enter the construction zone; ■ providing environmental briefings to construction crews; and ■ providing status reports, if needed, to the project proponent, the County, and other resource agencies (e.g., DFG). 	As needed during construction	Project applicant/ During construction in or near sensitive biological areas	El Dorado County	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>BIO-1.3 Minimize Impacts on Sensitive Biological Resources during the Project Design Phase</p> <p>Impacts on sensitive resources will be minimized to the extent possible during the design phase by making minor adjustments to proposed project routes and alignments (i.e., new rail, trails, underground utility lines, and construction corridor), and siting of facilities (staging areas, fencing, rest rooms) and landscaping to avoid sensitive habitats and species, and to avoid biological resources otherwise protected by El Dorado County ordinances and policies. The environmental monitor will work with the County environmental staff and project engineer to make minor revisions to proposed project routes and siting of facilities that will reduce impacts on sensitive resources where possible.</p>	<p>Once per project</p>	<p>Project applicant/ During design phase</p>	<p>El Dorado County</p>	
<p>BIO-1.4 Avoid or Minimize Impacts on Sensitive Biological Resources before and during Construction</p> <p>Sensitive biological resources located in or adjacent to the construction corridor will be protected by placing orange construction barrier fencing or stakes and flags, including buffer zones where appropriate and depending on the type of resource. Adjacent resources that may require protection include oak woodland, riparian woodland and scrub vegetation, drainages, vernal pools and swales, other wetlands, native grassland, special-status species populations, and elderberry shrubs. Buffer zones should be 250 feet around vernal pools and swales and wetlands, 100 feet beyond the upper bank edge of perennial drainages and the outer edge of riparian woodland and scrub canopies, 100 feet beyond the canopy of elderberry shrubs or clusters of elderberry shrubs, and 50 feet beyond special-status species populations and the upper bank edge of ephemeral drainages. The locations of these resources will be clearly identified on the construction drawings and marked in the field by the environmental monitor. Fencing or other barriers will remain in place until all construction and restoration work that involves heavy equipment is complete. In cases where woody riparian vegetation must be cleared, the vegetation will be trimmed rather than uprooted, where possible, to allow resprouting. Woody vegetation will be cut no more than 1 foot above ground level to encourage resprouting.</p>	<p>As needed during construction</p>	<p>Project applicant/ Before and during construction</p>	<p>El Dorado County</p>	
<p>BIO-1.5 Minimize Impacts on Oak Trees</p> <p>If tree removal cannot be avoided in oak woodland habitat, the project proponent shall develop and implement a mitigation plan in compliance with the El Dorado County General Plan to ensure canopy retention or replacement according to the standards set forth in Policy 7.4.4.4 of the El Dorado County General Plan (El Dorado County Planning Commission 1995) and, if adopted, to currently proposed El Dorado County oak woodlands guidelines, which provide additional guidance to the general plan policies.</p>	<p>Once per project</p>	<p>Project applicant/ Before improvement plans are approved</p>	<p>El Dorado County</p>	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>BIO-1.6 Minimize Biological Impacts through Replacement Plantings All areas disturbed by project construction that are not part of a planned facility shall be replanted with native trees and shrubs that reflect the habitats that were present on the project site before construction disturbance began.</p>	Once per project	Project applicant/Prior to final inspection	El Dorado County	
<p>BIO-6.1 Limit Construction Activities to the Dry Season Construction activities will be prohibited during the wet season (October 15 to April 15) in the 100-year floodplain of any drainage in the project corridor to reduce the potential for siltation impacts on vernal pools and swales, other wetlands, and drainages.</p>	Ongoing during construction	Project applicant/ During construction	El Dorado County	
<p>BIO-6.2 Compensate for the Loss or Disturbance of Jurisdictional Waters of the United States, Including Wetlands, at a Minimum Creation Ratio of 1:1 The project proponent will compensate for the loss or disturbance of waters of the United States. This acreage does not include wetlands that contain habitat suitable for fairy shrimp. For loss or disturbance of wetlands with suitable fairy and tadpole shrimp habitat, see Mitigation Measure BIO 13.1. Specific mitigation requirements will be determined as part of the Corps' Section 404 permitting process.</p> <p>The project proponent will compensate for the loss of waters of the United States at a minimum ratio of 1:1 (1 acre created for every acre affected). The wetlands must be created at a location approved by the Corps. Two options for creating wetlands are to purchase wetland creation credits at a wetland mitigation bank, or purchase land and design and construct mitigation wetlands in the project area.</p>	Once per project	Project applicant/Prior to start of construction	El Dorado County	
<p>BIO-7.1 Compensate for Permanent Impacts on Woody Riparian Vegetation The project proponent will compensate for the loss of any riparian woodland and scrub habitat by enhancing or creating similar habitat qualities and quantities at a ratio to be determined in consultation with DFG and possibly USFWS. Depending on the project and review by regulatory agencies, mitigation may be necessary at a compensation ratio of 2:1 or 3:1 (2 or 3 acres created or enhanced for every 1 acre removed).</p> <p>Potential mitigation sites that could be used to create or enhance riparian woodland and scrub habitat include the following:</p> <ul style="list-style-type: none"> ■ riparian areas that currently support non-native, weedy species (e.g., tree of heaven and giant reed) that could be cleared and replanted with riparian species and ■ sparsely vegetated or degraded riparian areas that could be enhanced through planting. 	Once initially, then annually for a minimum of 5 years	Project applicant/ Initial plan submitted prior to approval of improvement plans Compensation prior to final inspection Annual reporting for a minimum of 5 years	El Dorado County	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
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Potential mitigation sites must be evaluated as part of a formal habitat mitigation plan before the suitability of these sites to sustain riparian plantings can be determined. The following factors would be assessed as part of this mitigation plan: soils, hydrology (including groundwater levels and surface inundation), land use, potential disturbances, habitat functions, costs associated with maintaining the plantings, and overall potential for survival.

The habitat mitigation plan will include a list of recommended species, design specifications, an implementation plan, a maintenance program, and a monitoring program. A minimum of 5 years of monitoring (or longer if required as a condition of permits) will be conducted to document the degree of success or failure in achieving success criteria and to identify remedial actions. Annual monitoring reports will be submitted to DFG, the project proponent, and other interested agencies. Each report will summarize data collected during the monitoring period, describe how the habitats are progressing in terms of success criteria, and discuss any remedial actions performed.

BIO-9.1 Develop and Implement a Stormwater Pollution Prevention Plan and Minimize Disturbances to Perennial and Ephemeral Drainages
 The project contractor will develop a stormwater pollution prevention plan, as required under Section 401 of the Clean Water Act (in support of an NPDES permit). The contractor will be directed to follow the plan and implement measures to ensure that petroleum products are not discharged into perennial drainages or any flowing water within ephemeral drainages.

In addition to preparation of a stormwater pollution prevention plan, the following measures will be implemented to minimize disturbances to perennial and ephemeral drainages and aquatic resources. These measures will be included in the plan specifications and will be the responsibility of the contractor.

- All substances will be stored in designated staging areas at least 100 feet from perennial and ephemeral drainages with flowing water and 50 feet from ephemeral drainages without flowing water.

Once per project (plan) and as needed during construction (implementation)
 Project applicant/Plan submitted before improvement plans are approved; implemented as needed during construction
 El Dorado County

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
<ul style="list-style-type: none"> ■ Refueling and vehicle maintenance will be performed at least 100 feet from perennial and ephemeral drainages with flowing water, and 50 feet from ephemeral drainages without flowing water. 				
<ul style="list-style-type: none"> ■ Operation of heavy equipment in all drainages will be minimized to the extent possible. 				
<ul style="list-style-type: none"> ■ Temporary sedimentation barriers, such as sandbags or siltation fencing, will be installed to minimize siltation in both perennial and ephemeral drainages. The locations of these barriers will be determined by the resident engineer and environmental monitor and will be clearly marked in the field before construction activities begin. 				
<ul style="list-style-type: none"> ■ Avoid sidecasting material into or near drainages that may contain standing or flowing water at the time of construction. 				
<ul style="list-style-type: none"> ■ Restore to grade beds and banks of all drainages that are disturbed during construction to the preconstruction contours and replace the topsoil (top 12 inches of the profile). 				
<p>Additional specific measures may be included in the DFG streambed alteration agreement the Corps Section 404 permit to be obtained and implemented as part of the project. Impacts on wetland or riparian vegetation in drainages are mitigated through implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.5, BIO-6.2, and BIO-7.1.</p>				
<p>BIO-12.1 Compensate for Unavoidable Impacts to Special-Status Plants The project proponent shall compensate for loss or disturbance to special-status plant species. Compensation be will implemented under a mitigation plan developed in conjunction with DFG and USFWS. The requirement for a mitigation plan for non-listed species will depend on the species affected by the project and the extent of effects on the populations. If required, species-specific mitigation plans would be developed through consultation with DFG and other appropriate land management agencies.</p>	Once per project	Project applicant/ Compensation prior to final inspection	El Dorado County	

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>BIO-13.1 Compensate for Direct Effects on Vernal Pool and Swale or Seasonal Wetland Fairy and Tadpole Shrimp Habitat</p> <p>If vernal pool fairy shrimp and vernal pool tadpole shrimp habitat is present and cannot be avoided, the project proponent will compensate for the direct effects on vernal pool fairy shrimp and vernal pool tadpole shrimp habitat. The project proponent should conduct an onsite visit with USFWS and DFG to determine if potential vernal pools and swales in the study area are suitable fairy shrimp or tadpole shrimp habitat. If there is no suitable fairy shrimp or tadpole shrimp habitat, no additional mitigation is needed. If suitable habitat is present, the project proponent can assume that it is occupied habitat and mitigate for the loss of habitat. Or, the project proponent could retain a qualified biologist to conduct USFWS protocol-level surveys and determine presence or absence. These surveys typically require two seasons of surveys during the winter wet season; therefore, most project proponents assume presence and mitigate for the loss of habitat. This compensation would be achieved by implementation of the following measures, as described in the programmatic agreement between USFWS and the Corps:</p> <ul style="list-style-type: none"> ■ Create suitable fairy and tadpole shrimp habitat (vernal pools/seasonal wetlands) at a 1:1 ratio. The habitat must be created at a location approved by the USFWS. ■ Preserve suitable fairy and tadpole shrimp habitat at a 2:1 ratio. The habitat must be preserved at a location approved by the USFWS. ■ Before construction starts, the project proponent will obtain authorization from the USFWS to take listed fairy and tadpole shrimp species that would be affected by the project. A biological opinion under the federal Endangered Species Act may be needed from the USFWS before construction begins. 	<p>Once per project</p>	<p>Project applicant/Initial plan submitted prior to approval of improvement plans</p> <p>Compensation prior to final inspection</p>	<p>El Dorado County</p>	
<p>BIO-14.1 Determine if VELB Would Be Affected by the Project</p> <p>The project proponent would retain a qualified biologist to conduct field surveys along the entire alignment (up to 100 feet on each side of the alignment). The surveys should comply with the USFWS's VELB survey guidelines. The survey would be conducted to determine if VELB or VELB habitat would be affected by the project. If VELB or VELB habitat would not be affected by the project, no additional mitigation would be needed. However, if VELB habitat would be affected by the project, the project proponent would need to prepare and implement a VELB mitigation plan (See Mitigation Measure BIO-14.2).</p>	<p>Once per project</p>	<p>Project applicant/Initial plan submitted prior to approval of improvement plans</p> <p>Compensation prior to final inspection</p>	<p>El Dorado County</p>	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>BIO-14.2 Develop and Implement a VELB Mitigation Plan If VELB or VELB habitat could be affected by the project, the project proponent would develop and implement a VELB mitigation plan. The VELB mitigation plan would need to be prepared and implemented in compliance with the USFWS' VELB mitigation guidelines (U.S. Fish and Wildlife Service 1996). If no federal agency is involved with the project or if a federal agency does not agree to Section 7 consultation, the project proponent must prepare a habitat conservation plan as required by Section 10a of the federal Endangered Species Act. If a federal agency (e.g., Corps for CWA Section 404 compliance) is involved with the project, the federal agency would need to comply with Section 7 of the federal Endangered Species Act. In either case, the project proponent would prepare and implement a VELB mitigation plan.</p>	Once per project	Project applicant/ Before disturbance of affected VELB or VELB habitat	El Dorado County	_____
<p>BIO-15.1 Avoid Potential Direct Mortality and Loss of Habitat on California Red-Legged Frogs The project proponent would consult with the USFWS and DFG and possibly conduct a site visit with these agencies to develop measures to avoid and minimize potential impacts on this species in the streams in the study area. If potential impacts on the red-legged frog can be avoided, no additional mitigation is needed. If potential impacts on the red-legged frog cannot be avoided, the project proponent would implement Mitigation Measure BIO-15.2.</p>	Once per project	Project applicant/ During project design and before improvement plans are approved	El Dorado County	_____
<p>BIO-15.2 Develop and Implement a California Red-Legged Frog Mitigation Plan If potential impacts on the California red-legged frog cannot be avoided along Weber Creek and other streams and sites in the study area, the project proponent would prepare and implement a mitigation plan and obtain the appropriate federal Endangered Species Act permits, if necessary. The project proponent would consult with the USFWS and DFG to determine if additional mitigation is needed, and the USFWS and the Corps should assist the project proponent in determining whether incidental take authorization under the federal Endangered Species Act is needed. In addition to Mitigation Measure BIO-6.1, the project proponent may need to include additional measures that avoid and minimize impacts on the red-legged frog and additional habitat mitigation creation or enhancement in the study area.</p>	Once per project	Project applicant/ Before disturbance of affected California red-legged frog habitat	El Dorado County	_____

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>BIO-18.1 Conduct Winter and Breeding Season Western Burrowing Owl Surveys and Prepare and Implement Breeding and Foraging Habitat Compensation, if Needed</p> <p>To avoid potential impacts on burrowing owls or compensate for the loss of breeding and foraging habitat, the project proponent would comply with DFG's burrowing owl mitigation guidelines (California Department of Fish and Game 1995), as follows:</p> <ul style="list-style-type: none"> ■ Project proponent will retain a qualified wildlife biologist to conduct two burrowing owl surveys during the peak of the winter season (December 1-January 31) and two surveys during the peak of the nesting season (April 15-July 15) to determine whether burrowing owls are present within 500 feet of the construction corridor. ■ According to DFG guidelines, no additional mitigation is needed if burrowing owls are not found in the survey area or if the project site is at least 320 feet from active burrows. ■ If burrowing owls are present and the owl dens are closer than 320 feet to the project site, the project proponent would confer with DFG to determine the following: <ul style="list-style-type: none"> - Whether burrowing owls would be affected by construction or human activity. - What appropriate mitigation measures, if any, are needed to ensure that the owls are not harmed. - Whether the owls should be passively relocated from the project site before construction begins. Passive relocation or other measures should be implemented during the nonbreeding season (September to January 31) when eggs or young are not present. The relocation effort, if needed, would follow DFG's burrowing owl mitigation guidelines. - Determine if breeding or foraging habitat would be eliminated or degraded by construction or operation of the project. - What specific burrowing owl breeding and foraging habitat compensation is needed, in any. Two options for habitat compensation, both of which would need to be negotiated with DFG, are: 	<p>Following surveys</p>	<p>Project applicant/ Surveys before ground-disturbing activities begin Compensation prior to final inspection</p>	<p>El Dorado County</p>	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>* project proponent could purchase and enhance replacement burrowing owl breeding and foraging habitat in accordance with DFG burrowing owl mitigation guidelines or</p>				
<p>* project proponent could pay a per-acre fee to DFG for burrowing owl breeding and foraging habitat replacement and management in accordance with DFG burrowing owl mitigation guidelines.</p>				
<p>BIO-19.1 Conduct Tricolored Blackbird Surveys The project proponent would retain a qualified wildlife biologist to conduct tricolored blackbird surveys to determine whether this species occurs within 500 feet of the project corridor and to determine whether the species could be affected by the project. Two surveys should be conducted where suitable nesting sites exist (e.g., blackberry thickets and cattail marshes) during the peak nesting season (April 1 through June 15). If no tricolored blackbirds are found nesting along the survey area, no additional mitigation is needed. If tricolored blackbirds are found nesting in the survey area, the project proponent would implement Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.5, BIO-7.1, BIO-9.1, and BIO-19.2.</p>	Twice during project	Project applicant/ Survey before ground-disturbing activities begin and during peak nesting season (April 1 through June 15)	El Dorado County	
<p>BIO-19.2 Avoid Construction-Related Disturbance on Tricolored Blackbirds If tricolored blackbirds are found nesting in the study area and they could be disturbed or harmed during construction of the project, the project proponent would confer with DFG to determine the appropriate avoidance or compensation measures. These measures could include removal of potential nesting habitat before the nesting season begins to prevent the birds from nesting in the proposed construction area.</p>	Once per project	Project applicant/ Before construction activities begin	El Dorado County	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
Public Health and Safety				
<p>PHS-1.1 Implement Asbestos Hazard Dust Mitigation Plan Before start of construction or operations having ground disturbance, the project proponent shall prepare an asbestos hazard dust mitigation plan (as required by County ordinance) to be approved by the County's Environmental Management Department and the local air quality management district. If a plan has been previously prepared and approved for a site, the proponent shall comply with the findings and mitigations contained in this plan. An Asbestos Hazard Dust Mitigation Plan shall contain the following measures:</p> <ul style="list-style-type: none"> ■ During grading activities, the contractor shall implement dust control measures, such as wetting down exposed serpentine and covering areas exposed to vehicle traffic with non-asbestos material. Employees must be notified of the potential health risk of airborne asbestos and the County's new requirements. Additionally, the contractor and construction workers shall take every precaution possible to reduce the exposure to potential airborne asbestos, such as appropriate clothing and respiratory devices. ■ Vehicle access and speed shall be limited and reduced to the least feasible number of vehicles in construction areas containing serpentine rock. Areas along vehicle travel routes that are exposed serpentine rock shall be covered with non-asbestos material. ■ During construction activities, construction vehicles shall be rinsed before leaving the construction sites to reduce the dispersion of asbestos dust. ■ During construction, any excavated material containing serpentine rock shall be covered to reduce wind erosion and particulate dispersion. Disturbed surfaces and stockpiles shall be maintained with high-moisture conditions or applied with a binder to seal fibers. ■ Any exposed serpentine soils along the corridor shall be covered with clean soils to reduce potential health hazards. ■ Vegetation shall be planted to reclaim disturbed serpentine rock areas where feasible. 	Once per project (survey and plan) and as needed during construction (monitoring)	Project applicant/Plan approved before ground-disturbing activities begin Implemented during construction	El Dorado County	

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>PHS-1.2 Prepare a Phase I Environmental Site Assessment Before the commencement of any construction work begins in the vicinity of the site near the intersection of Amber Fields Road and South Shingle Road (Section B1 of the corridor), a Phase I Environmental Site Assessment shall be conducted for the portions of the corridor adjacent to the site in question to determine the presence/absence of hazardous materials contamination. The corridor shall be remediated accordingly and appropriate notification made to responsible agencies concerning the source of any contaminants found.</p>	Once per project	Project applicant/Before construction activities begin	El Dorado County	_____
<p>PHS-2.1 Provide Emergency Vehicle Access Controlled vehicle access shall be provided to allow emergency vehicle access to within 0.25 mile of any developed portion of the corridor.</p>	Plan review Inspection upon completion	Project applicant/Plan approved before improvement plans are approved	El Dorado County	_____
<p>PHS-4.1 Implement Public Safety Rail Measures Where excursion train lines cross roadways along Sections A1, A2, and B1 of the corridor, the project proponent shall:</p> <ul style="list-style-type: none"> ■ Install and maintain in proper operating conditions all railroad barriers and signals according to California Public Utilities Commission requirements. ■ Provide adequate signage along roadways on approach to the rail crossings at a sufficient distance as deemed appropriate by the California Public Utilities Commission and the County Department of Transportation. ■ Mitigation Measure PHS-4.1 is modified to read as follows: At-grade warning lights and gates shall be installed at the railroad crossing on South Shingle Road between Brandon Road and Memory Lane to close off the roadway and prevent vehicles from crossing in front of a train. ■ Review existing crossings with staff to assess proper angle of crossing. Optimum crossing would be the rail and roadway crossing at a 90-degree angle. 	Once per project	Completed prior to final inspection Project applicant/Prior to final inspection and permit to operate	El Dorado County	_____

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/Timing	Monitoring and Enforcement Responsibility	Date Completed
<p>PHS-4.2 Implement Public Safety Trail Measures Where pedestrian, bicycle, and natural trails cross roadways along the corridor, the project proponent shall:</p> <ul style="list-style-type: none"> ■ Provide adequate signage and other warning features, such as flashing lights or signalized intersections/4-way stops, along the respective roadways at trail crossings. ■ Provide crosswalk striping along the roadway. ■ Enhance safety at corridor's crossing with Mother Lode Drive (near Shingle Springs Depot) and Missouri Flat Road. Options to mitigate impacts at these locations include relocation of trail crossing to nearest street intersection, signalization of crossing, grade separation, and other enhancements. 	Once per project	Project applicant/Prior to final inspection	El Dorado County	_____
Noise				
<p>NOI-2.1 Minimize Use of Warning Horns and Limit Train Hours of Operation Warning horn usage is the loudest single component of the proposed train operations. For safety purposes, train operators are required to use their warning horns at approaches to all at-grade crossings. To reduce the potential for adverse public reaction to this loudest component of the project, warning horn usage should be limited to the minimum number of soundings required by the California Public Utilities Commission (CPUC), and the horn sound intensity should be adjusted to the minimum level considered safe and acceptable by the CPUC. In addition, train operations should be limited to the hours between 8:00 a.m. and 8:00 p.m.</p>	Ongoing	Project applicant/ During operation	El Dorado County	_____
<p>NOI-3.1 Conduct a Vibration Analysis before Approval of Projects and Implement Required Vibration-Reducing Measures When a specific excursion train project application is made, additional vibration analysis shall be conducted. The analysis shall take into account the location of vibration-sensitive land uses and specific operating parameters of the excursion train. The analysis shall include measures to reduce vibration levels below the criteria level of 80 VdB at adjacent noise sensitive uses. Potential vibration-reducing measures to be implemented include but are not limited to grinding or replacing track, welding track joints, and installing ballast mats. These measures will have the added benefit of reducing noise.</p>	Once per project	El Dorado County/ During review of application	El Dorado County	_____

Table 1. Continued

Mitigation Measure	Frequency of Reporting	Responsibility/ Timing	Monitoring and Enforcement Responsibility	Date Completed
Cultural Resources				
<p>CR-1.1 Implement a Plan to Address the Discovery of Unanticipated Cultural Resources The County shall ensure that the following measures are implemented before development of the Master Plan</p>	Ongoing	Project applicant/ Before improvement plans are approved for individual projects	El Dorado County	
<p>* <u>Conduct Surveys of Unsurveyed Areas.</u> Before the implementation of project activities in the Master Plan corridor, complete pedestrian surveys should be conducted to locate and record cultural resources.</p>				
<p>* <u>Evaluate Resources within the Project Corridor.</u> Resources within the project corridor that cannot be avoided should be evaluated. Additional research and test excavations, where appropriate, should be undertaken to determine whether the resource(s) meets CEQA and/or NRHP significance criteria. Impacts on significant resources that cannot be avoided will be mitigated in consultation with the lead agency for the project. Possible mitigation measures include:</p>				
<ul style="list-style-type: none"> - a data recovery program consisting of archaeological excavation to retrieve the important data from archaeological sites; 				
<ul style="list-style-type: none"> - development and implementation of public interpretation plans for both prehistoric and historic sites; 				
<ul style="list-style-type: none"> - preservation, rehabilitation, restoration, or reconstruction of historic structures according to Secretary of Interior Standards for Treatment of Historic Properties; 				
<ul style="list-style-type: none"> - construction of new structures in a manner consistent with the historic character of the region; and 				
<ul style="list-style-type: none"> - treatment of historic landscapes according to the Secretary of Interior Standards for Treatment of Historic Landscapes. 				
<p>If the project involves a federal agency, and is therefore subject to a memorandum of agreement (MOA), the inventory, evaluation, and treatment processes will be coordinated with that federal agency to ensure that the work conducted will also comply with Section 106 of the NHPA.</p>				

