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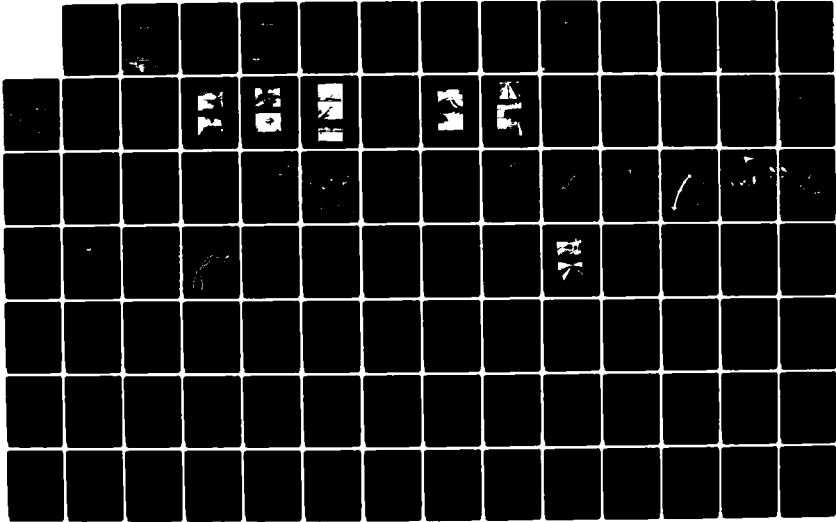
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RECREATION STUDY LOS ANGELES COUNTY DRAINAGE AREA(U)
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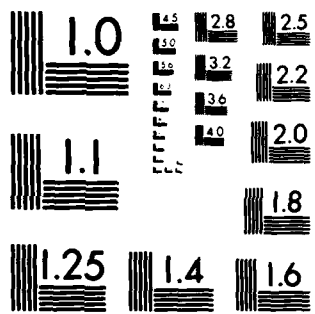
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The LACDA System Recreation Study

Los Angeles County Drainage Area

March 1980

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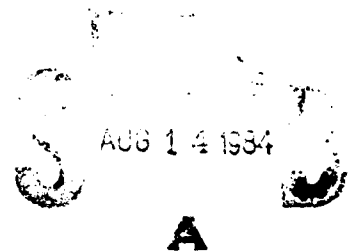
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The LACDA System Recreation Study

Los Angeles County
Drainage Area

March 1980



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DANIEL, MANN, JOHNSON, & MENDENHALL
3250 WILSHIRE BOULEVARD
LOS ANGELES, CALIFORNIA 90010

in association with
URBAN DESIGN DISCIPLINES, INC.
180 SOUTH LAKE AVENUE
PASADENA, CALIFORNIA 91101

Daniel E. Mann
S. Kenneth Johnson 1912-1974
Irvan F. Mendenhall
David R. Miller
Sven B. Svendsen
Albert A. Dorman
Stanley M. Smith

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March 21, 1980

Mr. John Williams
Chief of Recreational Development, Section A
U.S. Army Corps of Engineers
Los Angeles District
300 N. Los Angeles Street
Los Angeles, California 90053

Dear Mr. Williams,

The large amounts of land within the LACDA system are an important resource to an area such as the Los Angeles basin that has a great need for recreation facilities and open space convenient to its urban population centers. This study highlights opportunities for providing for these needs through the use of flood control land.

Because the Corps of Engineers acts in cooperation with local agencies to plan and develop recreational facilities, it has been the intent of this study to present information about opportunities for recreational use in such a way that local planners and citizens will be encouraged to consider such projects for their own communities. The study will hopefully serve as a catalog of ideas and opportunities that will stimulate imaginative projects.

Regional recreation planning is often hampered by the difficulty of coordinating the efforts of the many agencies and jurisdictions involved. The Corps of Engineers has an excellent opportunity to provide leadership in developing improved methods of coordination among the area's recreational planners. This opportunity derives from the Corp's existing relationships with many regional and local agencies, and from the recreation potential of the LACDA system. It is hoped that the information provided in this study will be useful in encouraging such improved regional coordination.

We anticipate the implementation of many interesting and imaginative projects within the LACDA system in future years, and look forward to the possibility of working with you on their development.

Sincerely yours,

DANIEL, MANN, JOHNSON, & MENDENHALL

Charles R. Rendall
Associate Vice President

Daniel, Mann, Johnson, & Mendenhall
2236 Wilshire Boulevard
Los Angeles, California 90010
Telephone: 213/381-3883
Cable: DMMJM Los Angeles

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Chapter 1.

Summary

CHAPTER 1 SUMMARY

The large amount of land within the Los Angeles County Drainage Area flood control system constitutes a significant portion of the remaining open space in the Los Angeles urban region. There is excellent potential for using parts of this land for recreational facilities, such as regional trails, linear parks, wildlife sanctuaries, and facilities for water-related recreation. The purpose of this study is to investigate the potential of the LACDA system for such recreational development. The study includes the flood channel system, spreading grounds, and debris basins. The major flood control basins and reservoirs are not included, since master plans are done for these areas on an individual basis.

There exist at present in the Los Angeles region only the beginnings of a regional network of trails for bicyclists and equestrians. Rapid urbanization, the construction of freeways and flood channels, and growing volumes of traffic on city streets have made recreational travel through the region increasingly difficult in recent years, especially for equestrians. Redevelopment of a regional trail system through the use of flood channel corridors and other available rights-of-way would encourage the use of bicycles for both recreation and commuting and would be a major stimulus to equestrian activity in the area.

The existing LARIO and San Gabriel trails, together with trails along the Los Angeles River and San Jose Creek channels, could form the backbone of a regional trail network linking the major areas of the basin and many of the basin's major recreational facilities. Secondary trails along the Tujunga Wash, Arroyo Seco, Arroyo Calabasas, Thompson Creek, and the Dayton Creek/Chatsworth Creek/Bell Creek channels would link the backbone trails to other major recreational areas and trails in the basin and would extend access to the system to a much larger portion of the area's population.

Other connectors that would significantly increase bicycle access to the system could be developed along a number of other channels, particularly Coyote Creek and Laguna Dominguez. Other channels with good potential for regional equestrian trails include the

Burbank Western/La Tuna Canyon/Hansen Heights system, Brown Creek, Aliso Creek, and Sawpit Wash.

Since the flood control system is the focus of this study, the regional trail system described here is based almost entirely on the use of flood channel corridors. It would be possible to develop a reasonably effective regional trail system using primarily the channel corridors and existing trails. Many parts of this system would be quite expensive, however, and it is likely that on-street routes or other alternative corridors would be preferable in some cases. In order to obtain the most comprehensive and cost-effective regional trail network that is possible for the area, information about on-street routes and other potential corridors should be considered along with the potential channel routes described here. Improved methods should be developed for coordinating the regional trail planning efforts of the agencies and citizens' groups now involved in this planning.

Further study is needed in a number of important areas to provide reliable information for the selection of routes and the design of trail facilities:

- User studies of the LARIO San Gabriel trails should be done to provide more accurate information on service areas, distances traveled, and types of users (e.g., recreational versus commuter). Information is also needed about problems experienced during use of the trails, such as poor signing, glass or debris on trails, and safety problems at tunnels or ramps.
- Studies are needed to improve equestrian ramps and crossings of the river bottom such as those at Griffith Park. A study should be done to develop a trail surface suitable for equestrian use on extended lengths of trail along the floors of channels. A concrete surface might be designed that would trap silt so that the impact of horses' hooves would be lessened.
- A method of bridging low-flow channels must be devised if trails are to be located on channel floors for significant distances.

There is also potential for the development of a wide variety of non-trail recreational projects on flood control system land. Land within flood channel rights-of-way could be developed as linear parks to provide much needed open spaces for urban neighborhoods. These linear parks might have hiking and jogging paths, exercise courses, and small picnic areas, as well as landscaping, murals, and other aesthetic improvements. Portions of the Los Angeles River channel between the Tujunga Wash and Sepulveda Basin offer excellent potential for such development.

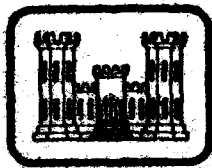
The attractive artificial streambed which replaced the previously existing culverted channel in Burbank's Buena Vista Park is one of the best examples of possible park uses for flood channels. It may also be possible to remove short sections of channel in some parks to allow natural riparian areas to develop. There is potential for both of these kinds of development along the Arroyo Seco channel, portions of which have some of the most attractive settings within the flood control system.

Many parks lie adjacent to flood control channels that could serve as lead-in strips to extend the park into adjacent neighborhoods and, in some cases, to improve access to the park. There may be some potential for motorized access to parks through these lead-in strips, using jitneys or trams; however, this possibility appears to be quite limited.

Inflatable rubber dams might be used in a number of parks to provide ponds for activities such as wading, swimming, or boating. Spreading grounds or ponds in debris basins could be used for hiking.

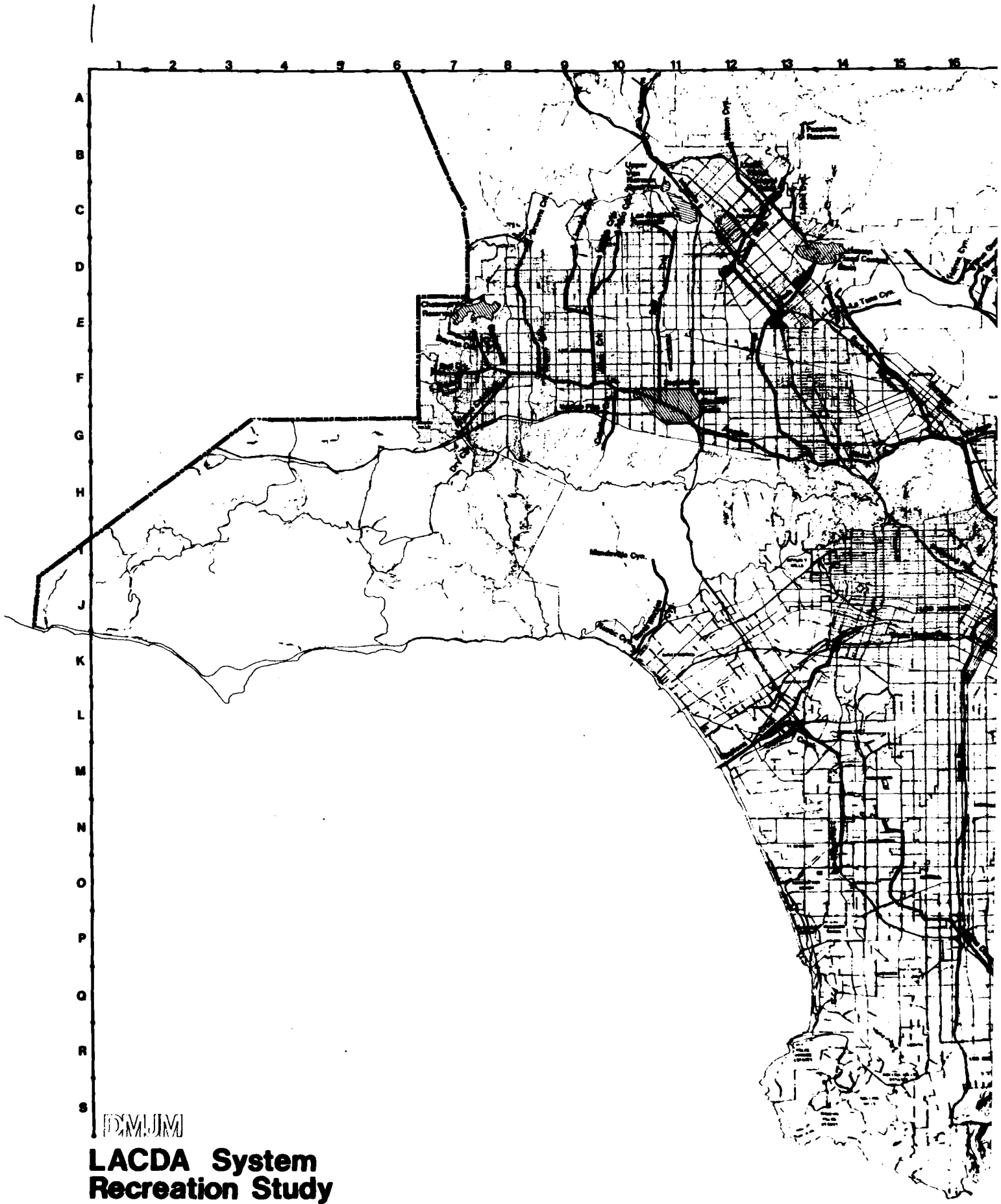
The large amounts of open space within the flood control system have excellent potential for conservation uses. Wildlife sanctuaries could be created in spreading grounds and debris basins, along with nature study facilities. Land within the flood channel rights-of-way could be landscaped with plants that provide food and shelter for urban wildlife.

Many other recreational activities, such as skating and court games, have potential for application within the LACDA system. Given the extent and diversity of facilities within the system, there is much room for creative thought in applying the ideas investigated here to additional locations, or in developing new concepts for recreational use of the system.

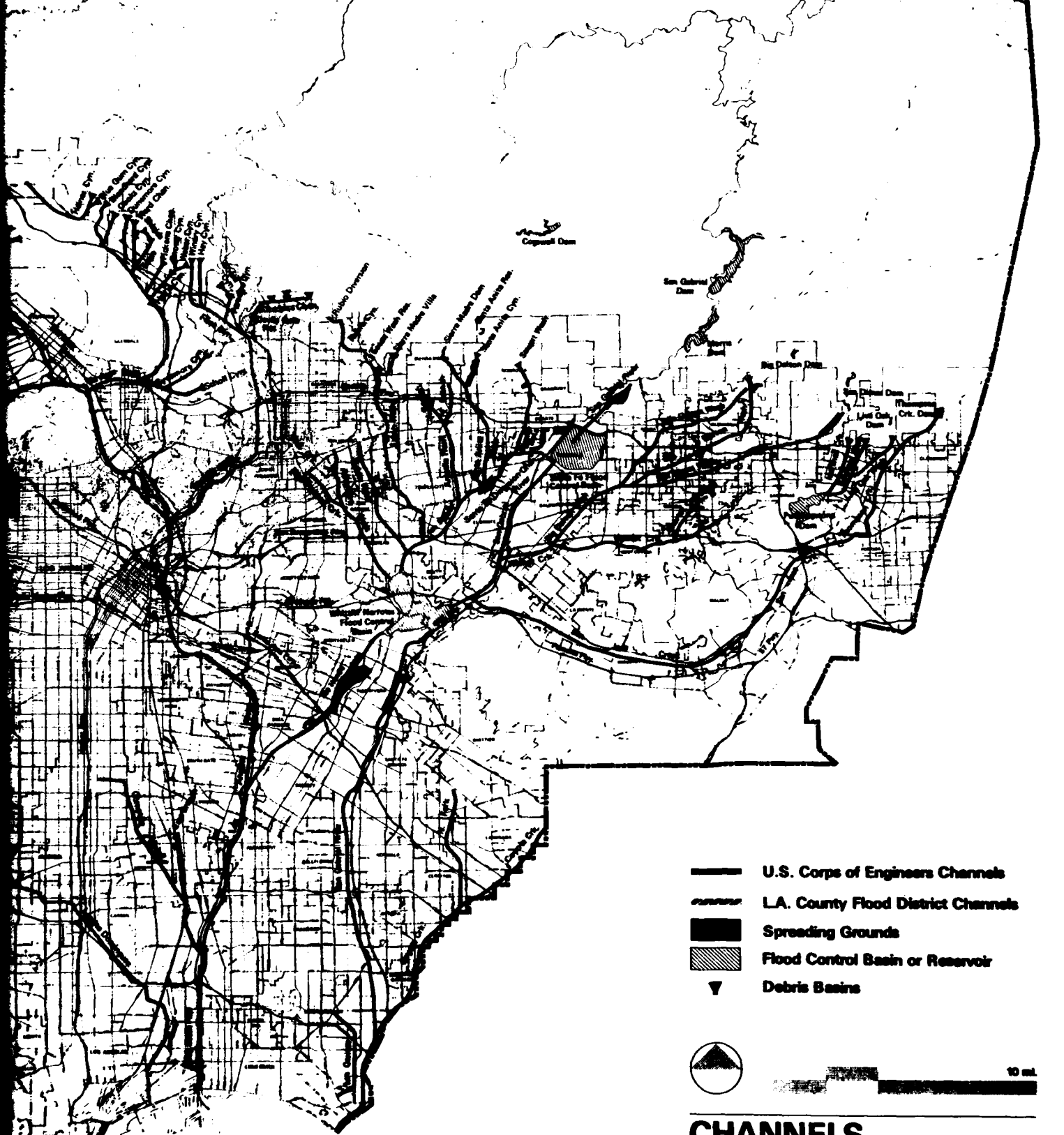


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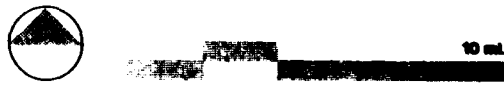
Introduction



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- U.S. Corps of Engineers Channels
- L.A. County Flood District Channels
- Spreading Grounds
- Flood Control Basin or Reservoir
- Debris Basins



CHANNELS SELECTED FOR STUDY

FIG. 1

CHAPTER 2 INTRODUCTION

The Los Angeles County Drainage Area (LACDA) includes all of Los Angeles County south of the watershed divide of the San Gabriel Mountains. The area contains an extensive network of flood control channels, which carry runoff from the urban region and the surrounding mountains to the ocean or to spreading grounds and percolation basins. These channels follow the approximate courses of the area's natural streambeds but are straightened and lined with concrete or rock.

The primary function of the system is to prevent flooding. The Los Angeles urban area could not exist in its present form without such flood protection, since many regions of heavy urban activity lie in areas that were previously subject to damaging floods. The Los Angeles River, in particular, has shifted its course several times during periods of heavy flooding and would have the potential for great destruction were it not channelized.

The U.S. Army Corps of Engineers began work on the Los Angeles River flood channel in 1938. Since that time, most of the rivers and streams in the basin have been channelized by the Corps and the Los Angeles County Flood Control District, and an extensive network of reservoirs, flood basins, debris basins, spreading grounds, channels, and storm drains has been constructed to control flooding and conserve water for beneficial uses. Figure 1 indicates the major flood control facilities in the LACDA system. Underground channels and storm drains are not shown in the figure.

The system has eliminated the danger of flooding in most parts of the region and has made much previously unusable land available for development. It has had negative effects as well, however. Attractive streamside areas have been replaced with concrete channels; much riparian vegetation and animal habitat has been lost; and barriers have been created by the channels that isolate and divide communities.

As the availability of land in the basin has decreased in recent years, interest has grown in possible secondary uses of the large amounts of land contained within the

flood control system. Much of this land serves little useful purpose during normal periods of low water flow, and a number of compatible secondary uses have been demonstrated or suggested.

For the purpose of maintenance access, flood channels usually have strips of land from 10 to 30 feet or more in width along each side. The linear nature of the channel system gives much of this land potential for trail use or for use as neighborhood green space/open space corridors. Other suggested uses involve water-related recreation, wildlife conservation, or aesthetic improvements. Such productive secondary uses can make flood control facilities useful resources to their neighborhood communities and can often mitigate to some extent the negative effects of the system.

Flood channels may be either trapezoidal in section with sloping sides, or rectangular with vertical sides. Rectangular channels are usually all concrete. Trapezoidal channels may have concrete or stone sides, and paved or unpaved bottoms. The larger channels often have low-flow ditches, which carry the small amounts of water usually present. This leaves most of the channel floor dry on a normal basis and concentrates wear in a small area of the channel. Fencing along the channels varies, but rectangular channels are usually fenced at both the channel edge and the right-of-way boundary, while trapezoidal channels are generally fenced only along the right-of-way.

EXISTING MULTIPLE-USE PROJECTS IN THE LOS ANGELES AREA

Regional Parks in Flood Control Basins

Several of the basin's major recreational parks are located in flood control basins. These include the Whittier Narrows, Hansen Dam, Bonelli Park, Santa Fe Dam, and Sepulveda Basin Recreational Areas. Recreational areas have also been proposed for the Chatsworth and Devil's Gate Reservoirs. The large

amounts of land available in these basins have been used for a wide variety of recreational and conservation facilities.

Bicycle and Equestrian Trails (Ref 2-1, -2, -3)

The LARIO trail system includes both bicycle and equestrian trails along the lower Los Angeles River flood channel and the Rio Hondo channel. There are also bicycle and equestrian trails along most of the length of the San Gabriel River. These are major regional trails that traverse the width of the Los Angeles basin from the San Gabriel foothills to the coastal area. They provide improved access to recreational facilities in these areas and at the Whittier Narrows. They include rest and staging areas and ramps or tunnels for crossing major obstructions to the channel rights-of-way, such as streets and railroads.

Bicycle trails also exist along portions of the Tujunga Wash, Thompson Creek, and Brown Creek channels, along a short length of the Burbank Western channel, and in the Sepulveda Basin. A major regional bicycle trail is under construction along the Ballona Creek channel.

There are existing equestrian trails along portions of the Marshall Creek, Walnut Creek, Brown Creek, Winery Canyon, Flint Canyon, and Gould Canyon channels, and along the Los Angeles River channel in the area of Griffith Park.

Buena Vista Park (Ref 2-4, -5)

The flood channel that passes through Burbank's Buena Vista Park was formerly a typical concreted culvert, which was replaced with an artificial streambed that carries the creek's normal flows. The artificial stream has a winding, rocky bed similar in appearance to a natural streambed. There are grass benches along either side of the stream. These grassy areas are about three feet lower than the elevation of the park and carry higher water flows when they occur. They are bounded by artificial rock ledges, which act as walls of the new channel during flood periods.

The artificial streambed is a vast improvement aesthetically over the old concrete culvert and is a major attraction of Buena Vista Park. The project won an American Society of Landscape Architects design award for park and recreational planning.

Nature Centers and Wildlife Sanctuaries

Wildlife sanctuaries and nature study facilities currently exist on flood control land in the Whittier Narrows (Ref 2-6), Santa Fe Dam, and Eaton Dam flood basins. A wildlife sanctuary is also planned for the Rio Hondo spreading grounds (Ref 2-1). Besides protected wildlife habitat, the existing sanctuaries include such facilities as interpretive centers, nature trails, and observation blinds. Wildlife and vegetation studies have been done on portions of the Los Angeles River Channel and of several debris basins and spreading grounds by biologists of the Los Angeles County Department of Parks and Recreation.

Tujunga Wash Greenbelt Area (Ref 2-7)

Besides the existing one-mile segment of bicycle trail already mentioned, which lies adjacent to Los Angeles Valley Junior College, a 13-acre greenbelt, a hiking trail, and a large mural have also been constructed in the same area. The trails serve the junior college and an adjacent high school. The development includes a rest area for bicyclists and an attractive timber bridge that spans the channel.

Walnut Creek Regional Park

An unchanneled portion of Walnut Creek near Puddingstone Reservoir has been developed as a natural park. The park contains an equestrian trail, parking facilities, and rest rooms but has otherwise been left in a relatively natural riparian condition. The topography of the area provides natural protection from flood damage, and channelization therefore has been unnecessary in this area. This portion of Walnut Creek is one of the few unchanneled streams remaining in the basin below the foothill areas.

Flint Canyon Linear Park

A portion of Flint Canyon Creek in La Canada near Devil's Gate Reservoir has been similarly retained in a natural riparian state. An equestrian trail is located along the creek corridor. Farther to the west the equestrian trail continues through a linear park built within the channel right-of-way over a covered portion of the Flint Canyon channel. The park is attractively landscaped and is an excellent example of the potential for use of channel corridors.



Bicycle path along the Tujunga Wash Channel at Los Angeles Valley Junior College.



Brown's Creek Equestrian Trail.



Artificial streambed at Buena Vista Park in Burbank.



Natural streambed along the Arroyo Seco.



The LACDA system includes large amounts of open space with natural vegetation that provides habitat areas for wildlife. Top photo: Little Dalton Debris Basin. Bottom photo: Los Angeles River Channel.



Mural on the wall of the Wash Channel at Los Angeles Valley Junior College.

Walnut Creek and Peck Reservoir Fishing Ponds

Fishing ponds exist at the Walnut Creek spreading grounds (the Walnut Creek "Fishing Hole") and at the Peck Reservoir Conservation Park. There are also fishing ponds at the Whittier Narrows Recreation Area.

CONSTRAINTS TO SECONDARY USES OF THE FLOOD CONTROL SYSTEM

While there is considerable opportunity for recreational use of land within the flood control system, this opportunity is limited by a number of practical constraints.

Regulatory Constraints

The major constraint to secondary uses of the flood control system is the requirement that such uses not interfere with the flood control function of the system. No structural changes can be made in any flood system facility that significantly would alter its ability to hold or carry water. Any obstructions such as dams or fences placed in a channel for recreational use must be removable (or deflatable, in the case of dams). Structural modifications such as ramps under street obstructions and bridges over low-flow channels must be engineered to satisfy hydraulic as well as recreational parameters. Both the Corps of Engineers and the Los Angeles County Flood Control District review all plans for secondary uses before permits are granted.

Other Corps and Flood District regulations are primarily concerned with safety. For example, fences must be provided along the sides of channels where there is a danger of injury from falls, and trails along channel corridors must be closed during rain.

Other regulatory constraints may be applied by any of the local jurisdictions or agencies involved in the planning, maintenance, and operation of recreational facilities on flood control land.

Physical Constraints

Major physical constraints limit the use of many flood channel corridors. Channels are crossed frequently by bridges that carry streets, freeways, and railroads. In some cases, these bridges are built above grade with sufficient vertical and horizontal clearance underneath for paths. Usually, however, the bridges obstruct access along the corridor, and trail users must cross the

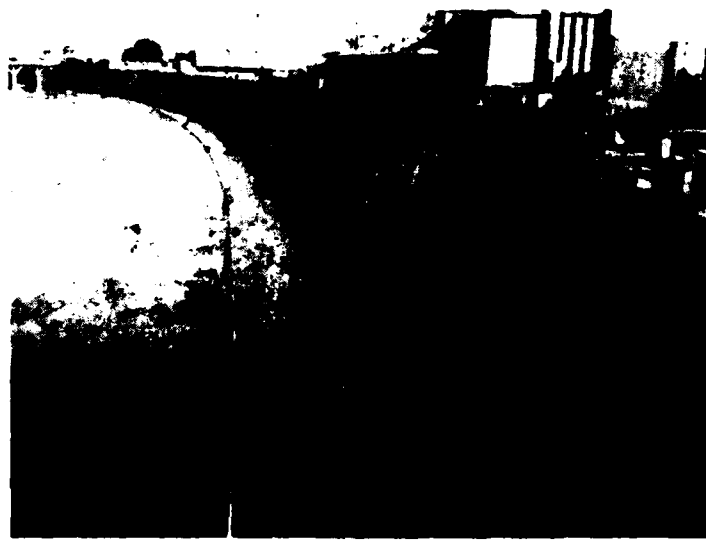
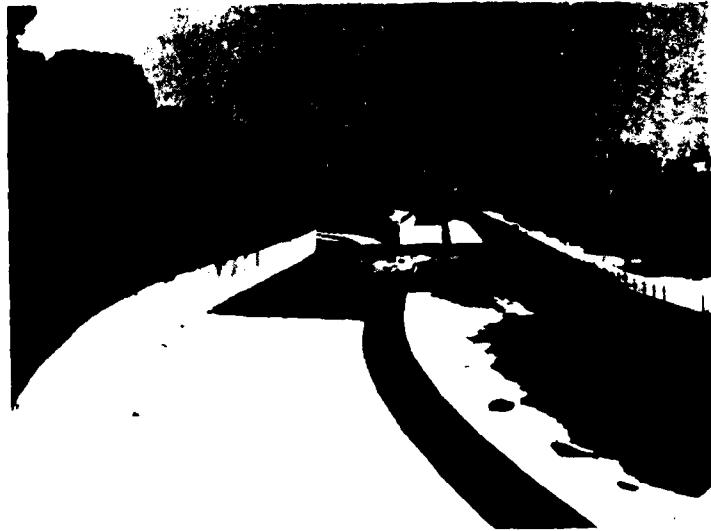
obstruction at grade or cross under it through tunnels or on ramps.

Trapezoidal channels are better suited to most recreational uses than rectangular channels. Ramps usually can be cut into walls of trapezoidal channels so that trails along a channel side can continue under an obstructing bridge. Undercrossings along vertical channels must be through tunnels, which are more expensive and sometimes difficult to construct because of underlying utility lines.

It is usually not desirable to locate trails within the channels themselves. The recreational experience is decreased by restricted visibility from the channel floor, and the aesthetic environment is generally poor. However, in cases where it is necessary to use the channel floor, it is much preferable that the channel be trapezoidal in section rather than rectangular. Safety concerns are increased if the floor of a rectangular channel must be used, because escape from a rectangular channel might be difficult in the event of an unexpected release of water. Any use of channel floors requires safety procedures to ensure that the trails are closed before water is released into the channels.

Inlets where other channels enter obstruct access along the side of a channel, and these must be bridged across to provide a continuous path. Pipes and pedestrian bridges cross channels in many places, but these usually do not interrupt access. Other secondary uses of the channel right-of-way - such as industrial structures, parking lots, and rail yards - also physically obstruct passage along the right-of-way in many places.

In places where the channel right-of-way is partially obstructed, suitability for trail use was judged on the basis of minimum recreational trail standards. The CALTRANS standards for bikeways (Ref 2-8) specify a minimum width of eight feet for a two-way bike path and five feet for a one way path. Minimum vertical clearance is eight feet. The Equestrian Trails, Inc. manual on equestrian trail design (Ref 2-9) specifies a desirable two-way width of at least twelve feet, and a minimum of five feet, with a minimum vertical clearance of ten feet.



Typical obstacles to potential trails along flood channels. Top photo: Tujunga Wash inlet (on the right) obstructs the access road along the north side of the Los Angeles River Channel. Bottom photo: Industrial structures within the right-of-way of the Los Angeles River Channel



Railyards lie along both sides of the Los Angeles River near downtown Los Angeles. Bridge abutments are the most frequent obstructions to access along flood channels. Power lines frequently share right-of-way space with flood channels, and the supports sometimes obstruct access.

Ownership

Some of the land within flood channel corridors is owned by the Corps of Engineers or by the County Flood Control District. Much, however, is only leased for flood control purposes, and these leases usually do not include rights for secondary uses such as recreation. Determination of ownership of the many parcels along the channel right-of-way can be a lengthy and expensive process. After ownership is determined, owners must be located. This is sometimes difficult or impossible, and rights to use of the land must be purchased or acquired through condemnation. The time and cost required to obtain the necessary right-of-way agreements is a major detriment to secondary uses of land within the flood channel corridors.

Jurisdictional Coordination

Most flood control channels pass through the boundaries of a number of incorporated cities and through unincorporated parts of the county. Each of these local jurisdictions has several agencies that may be involved in recreation planning, such as departments of parks and recreation, roads, engineering, transportation, and district planning. The Southern California Association of Governments, CALTRANS, the State Department of Parks and Recreation, the National Park Service, and other regional, state, and federal agencies may be involved in certain cases. Both the U.S. Army Corps of Engineers and the Los Angeles County Flood Control District have jurisdictional authority over most flood channels.

To complete a regional recreational trail along a flood channel corridor, jurisdictional agreements must be reached on the design, funding, and maintenance of the trail facilities. This can be a lengthy process in the case of a single trail and could be a major problem in the development of an effective regional network of trails. There may be disagreement on methods, priorities, and in some cases on the most desirable secondary uses for the available land. For example, there is a potential for conflict over the development of recreational trails along portions of the Los Angeles River channel that have been recommended for use as mass transit corridors.

The roles of various agencies involved in recreation planning in the Los Angeles region are discussed further in Chapter 6.

Safety

The need for fencing along rectangular channels to prevent falls has already been mentioned, as has the need for safety procedures to prevent the release of water from dams while people are on the floors of channels, should future trails make use of segments of channel floor.

There are also concerns about the safety of trail users from assault or robbery, particularly in and near tunnels or underpasses. Incidents of this type have occurred on trails within the channel system and could be expected to increase if new trails are added, particularly along rectangular channels where tunnels would be required. Regular police patrols and effective procedures for locating and designing tunnels are necessary to minimize this problem.

Safety hazards also arise from the unauthorized use of trails by motorcyclists. While this can be a problem for slower-moving bicyclists, it is especially dangerous on equestrian trails, where frightened horses can throw riders. Problems of this nature have been most frequent on trails along the Los Angeles River in the Griffith Park Area.

Conflicts with Channel Neighbors

Some owners of homes adjacent to flood channels object to the development of trails along the channels. They fear a loss of privacy, vandalism, or use of the channel corridor by thieves to gain access to their property. Complaints of this type have been most frequent in places where trails lie on top of levees higher in elevation than the adjacent yards. High walls and/or heavy vegetative screening are usually required in these cases. The problem is usually not significant in places where adjacent yards are several feet higher in elevation than the trail surface, as is more often the case.

Funding

Funds available for recreation and transportation projects (bicycle paths are often partially financed through transportation funds) are quite limited, particularly since Proposition 13 cutbacks. Sufficient funds are never available for all the high-priority recreation and transportation needs of the region, and

there is always competition among projects for the money available. This is a basic constraint to the development of recreational facilities within the flood control system and is closely related to each of the constraints listed above. In particular, the high cost of the maintenance of recreational facilities has become a significant problem.

The Corps of Engineers' Code 710 Program is a major source of potential funds for recreation projects. The availability of this money could have a significant influence on the development of a network of regional trails in the area. This and other sources of funding are discussed in Chapter 6.

THE LACDA SYSTEM RECREATION STUDY: AIMS AND METHODS

The purpose of this study is to conduct an analysis of the recreation potential of land within the LACDA system. Because of the linear nature of the channel system, emphasis is placed on determining the potential for recreational trail development within channel corridors, and on establishing a method for assigning priorities for development among those channels having such potential. The conclusions of this portion of the analysis are contained in Chapter 4.

Chapter 5 contains a discussion of potential projects other than recreational trails that appear to be feasible for implementation within the LACDA system, and possible locations within the system for such projects.

Land Included in the Study

Flood control basins and reservoirs are not considered in this analysis, since master plans are prepared for each of these areas on an individual basis. All other parts of the LACDA system, including flood channels, spreading grounds, and debris basins, are considered in the study as potential locations for recreational activities. Ballona Creek, the San Gabriel River, the Rio Hondo River, and the Los Angeles River south of the Rio Hondo confluence are not included because these channels have already been studied for the design of existing trails or trails now under construction. The study includes about 230 miles of flood channel.

As indicated in Figure 1, most flood channels in the Los Angeles area are owned by the U.S. Army Corps of Engineers. These channels are leased to the Los Angeles County Flood Control District. Some channels, however,

were constructed and are owned by the Flood Control District. These channels are not currently part of the LACDA system; therefore, they are not eligible at present for Corps of Engineers Code 710 Program funds. Nonetheless, these channels are included in the study. Some of the District channels are now being studied by the Corps for flood control deficiencies and may be incorporated into the LACDA system. The Arroyo Seco, Los Cerritos, and the upper portion of Laguna Dominguez are included in this category.

Methodology

The study was divided into three major phases: data gathering, a visual survey of the flood channel system, and analysis.

Data gathering activities consisted primarily of a literature search and meetings with agencies and local citizens' groups. Information was collected on: existing and proposed secondary uses of flood control lands, physical characteristics of the flood control system, recreational facilities in the Los Angeles area, significant ecological areas, fault zones, traffic attractors and generators, recreation needs in the Los Angeles area, roles played by the various agencies involved in recreation planning, design standards for recreational facilities, and possible sources of funding.

The visual survey of the flood channel system resulted in information needed to determine the suitability of each channel for the various types of recreational activity being considered. Survey information is contained in Appendix 1.

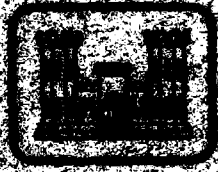
The analysis made use of information gathered during the first two phases of the study in order to determine specific projects recommended for implementation:

- Information from the literature search and from agency meetings was used to determine possible secondary uses.
- The list of potential secondary uses was refined on the basis of information from the channel survey.
- Information from the literature search and from agency meetings was used to determine recreation needs of the Los Angeles area. This included an analysis of the existing trail systems, location of recreational facilities, and locations of traffic attractors and generators to determine where regional trails are most needed.

- The list of possible secondary uses; information on the recreation needs of the region, including needed trail segments; and survey data indicating physical capabilities of system facilities were then used to determine specific projects most suitable for implementation in the LACDA system.

CHAPTER 2: REFERENCES

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Chapter 3

Recreation in the Los Angeles Region: A Framework for Planning

CHAPTER 3 RECREATION IN THE LOS ANGELES REGION: A FRAMEWORK FOR PLANNING

Southern California is one of the nation's leading vacation and recreation areas. The mild climate and rare combination of ocean, mountain, and desert environments provide abundant resources for leisure activities. However, the Los Angeles metropolitan area has grown at such a rapid rate that the development of outdoor recreational resources in the urban area has not kept pace with the growth of the population. There is a need for open space — including land suitable for recreational use — in areas easily accessible to the region's population centers. Much of the area's committed open space lies within the National Forests or on the Channel Islands and is not conveniently situated for the daily use of large numbers of people.

Since elements of the flood control system are distributed throughout the region and often lie in or near densely populated parts of the basin, there is excellent potential for use of land within the system to help satisfy the open space and recreational needs of the area. A number of the major regional parks within the urban area are located in flood control basins or at reservoirs, and others are planned for similar locations. The channel corridors, because of their linear nature and the fact that they lead to and from major regional parks in flood basins and reservoirs, have excellent potential for regional trail development.

REGIONAL TRAILS

In planning for a regional trail network based partly on the use of flood channel rights-of-way, it is first necessary to establish basic concepts that lend themselves to the development of criteria and a system of priorities that determine which channels have the best potential for trail development.

There has been much recent debate concerning the merits of local or commuter bicycle routes versus those of regional or recreational routes, and over a formula for encouraging a desirable ratio of development of the two types. Commuter routes are usually on-street trails which may be separated physically from traffic (Class II trails) or separated only by street markings (Class III). Regional routes are often off-street trails (Class I).

There is an obvious need for both types of development. Because of the potential for linking most major areas of the basin through use of the channel corridors and for providing trails completely separated from auto traffic, the emphasis in this study will be on developing an interconnected regional network of trails that provides for rapid long-distance travel through the area, rather than shorter local trails oriented toward commuter use. Therefore, a major criterion for route selection is that trails should extend or connect existing lengths of regional trail rather than add new isolated segments. In terms of cost/benefit considerations, potential benefits are greatly increased by connecting new trails to existing trails, since each will feed the other and increase the other's service area.

A second major consideration is that routes should be selected to provide access to and from major origins and destinations. Trails that neither lead to desirable destinations nor provide access from populated areas will generally not be heavily used. Destinations, in the case of bicycle trails, should include not only recreational facilities but also schools, business districts, shopping centers, and other points of interest to both commuters and recreational riders.

Basic information needed for trail planning is provided in Figures 2, 3, and 4.

Figure 2 shows major regional recreation facilities in the area that might serve as destinations for trail users. It also indicates the location of the National Forest boundary and of all neighborhood parks adjacent to flood channels. Names of the recreation facilities are given in Table 3-1, and additional information about each is provided in Appendix 2.

Figure 3 indicates many of the major traffic attractors and generators in the LACDA area. Secondary schools are shown if within one mile of a flood channel; colleges, universities, shopping centers, and business districts if within two miles. Two miles are considered to be the maximum distance most users would travel from a trail to a destination considering that the

distance to the trail and along the trail must be included in the total trip's length. One mile is used for secondary schools because these schools are often located less than a mile apart and students rarely ride a longer distance. Primary schools are not shown in Figure 3 because they are so evenly distributed throughout the region that they would not help to distinguish between potential channel routes. Names of the colleges and universities shown in Figure 3 are in Table 3-2.

Figure 4 shows the major existing and proposed trails in the area, as well as equestrian facilities and major concentrations of horses. Proposed trails are shown only where there is a strong likelihood that they will actually be built, such as the existence of Los Angeles City Capital Improvement Project Requests. The Ballona Creek Bicycle Trail is shown as an existing trail since contracts had been let for its construction at the time of publication of this report. This is also true of sections of the LARIO Trail. All existing bicycle trails shown in Figure 4 are Class I except the San Vicente Bikeway (north of Santa Monica), the John S. Gibson Bike Path (east of Palos Verdes), the Arroyo Seco Bike Path, and the Heartwell Park/Palo Verde/Los Coyotes Diagonal Bike Routes (north of Los Cerritos Channel in Long Beach).

The State Trail Corridors shown in Figure 4 are part of a statewide system of bicycle, hiking, and equestrian trails planned by the State Department of Parks and Recreation. Actual locations of trails within the corridors shown have not been determined except for the South Bay Bike Trail along the west coast of the region and the proposed lengths of bicycle trail shown along the south coast (Ref. 3-1).

Figure 5 shows a concept for regional trail development based upon the goal of a network of trails linking the major parts of the region through the flood channel corridors. The existing LARIO and San Gabriel trails together with eastern and western extensions from these trails through the San Gabriel and San Fernando Valleys would form the backbone of this system. Secondary connectors would provide access to the backbone trails from residential areas and would link the backbone to major trail destinations and to other trails, including those within the state trail corridors. Major connections needed would be those to the South Bay Bike Trail through the heavily urbanized southern Los Angeles City area; to the Santa Monica Mountains trail corridor, and to the northern foothills of both the San Gabriel and San Fernando Valleys. In Chapter 4 this concept is developed further into specific trail projects.

FAULT ZONES AND SIGNIFICANT ECOLOGICAL AREAS

Figure 6 indicates the location of major faults and significant ecological areas within the LACDA region.

Fault zones are not a major constraint to most types of development being considered here, such as trails and linear parks. Their locations are included, however, to encourage concentrations of recreational activity, such as rest areas and wading pools, to be placed outside these zones when alternative locations are available.

Significant ecological areas are both constraints and opportunities to recreational planners. These areas have potential for conservation and interpretive facilities and they often contain open space that is attractive for trail use and other recreational purposes. Great care must be exercised in the use of these areas, however, to prevent degradation of their biological resources. The areas shown have been designated as ecologically significant by the Los Angeles County Department of Regional Planning. The numbers given are those used on the County's designation system. A key to the names of these areas is provided in Table 3-3, and information about the biological resources of each of the areas is contained in Appendix 3.

TABLE 3-1. REGIONAL RECREATION FACILITIES IN THE LACDA AREA
(Key to Figure 2)

- | | |
|--|---|
| 1. Chatsworth Reservoir Regional Park | 29. Santa Fe Dam Recreation Area |
| 2. Porter Ranch Park | 30. South Hills Park |
| 3. Devonshire Downs | 31. San Dimas Canyon Park |
| 4. Van Norman Lakes | 32. Marshall Canyon County Park |
| 5. San Fernando Mission | 33. Rancho Santa Ana Botanical Gardens |
| 6. El Cariso Regional Park | 34. Los Angeles County Fairgrounds |
| 7. Roger Jessup Park | 35. Frank G. Bonelli Regional County Park |
| 8. California Busch Gardens | 36. Ganesha Park |
| 9. Hansen Dam Recreation Area | 37. Claude Osteen Motorbike Park |
| 10. Sepulveda Dam Recreation Area | 38. Walnut Creek County Park |
| 11. Van Nuys Sherman Oaks Park | 39. Kellog Arabian Horse Farm |
| 12. Verdugo Mountain Park | 40. Industry Hills Civic Recreation Conservation Area |
| 13. Stough Park | 41. Offerbein State Recreation Area |
| 14. Brand Park | 42. Whittier Narrows Dam Recreation Area |
| 15. John Anson Ford Theater | 43. Great Western Exhibit Center |
| 16. Griffith Park | 44. South Gate Park |
| 17. Echo Park | 45. El Dorado Park |
| 18. Los Angeles Civic Center | 46. Long Beach Recreation Park |
| 19. Elysian Park | 47. Baldwin Hills Regional Park |
| 20. Ernest E. Debs Regional Park | 48. Tompkins Way Reservoir |
| 21. Scholl Canyon Regional Park | 49. Dockweiler State Beach |
| 22. Brookside Park | 50. Santa Monica State Beach |
| 23. Norton Simon Museum | 51. Will Rogers State Beach |
| 24. Huntington Library, Art Gallery, and Botanical Gardens | 52. Rivas Canyon Park |
| 25. San Gabriel Plaza Area | 53. Will Rogers State Park |
| 26. Eaton Canyon Park | 54. Rustic Canyon Park |
| 27. Los Angeles County Arboretum | 55. Topanga State Park |
| 28. Arcadia County Park | 56. Sylvia Park |

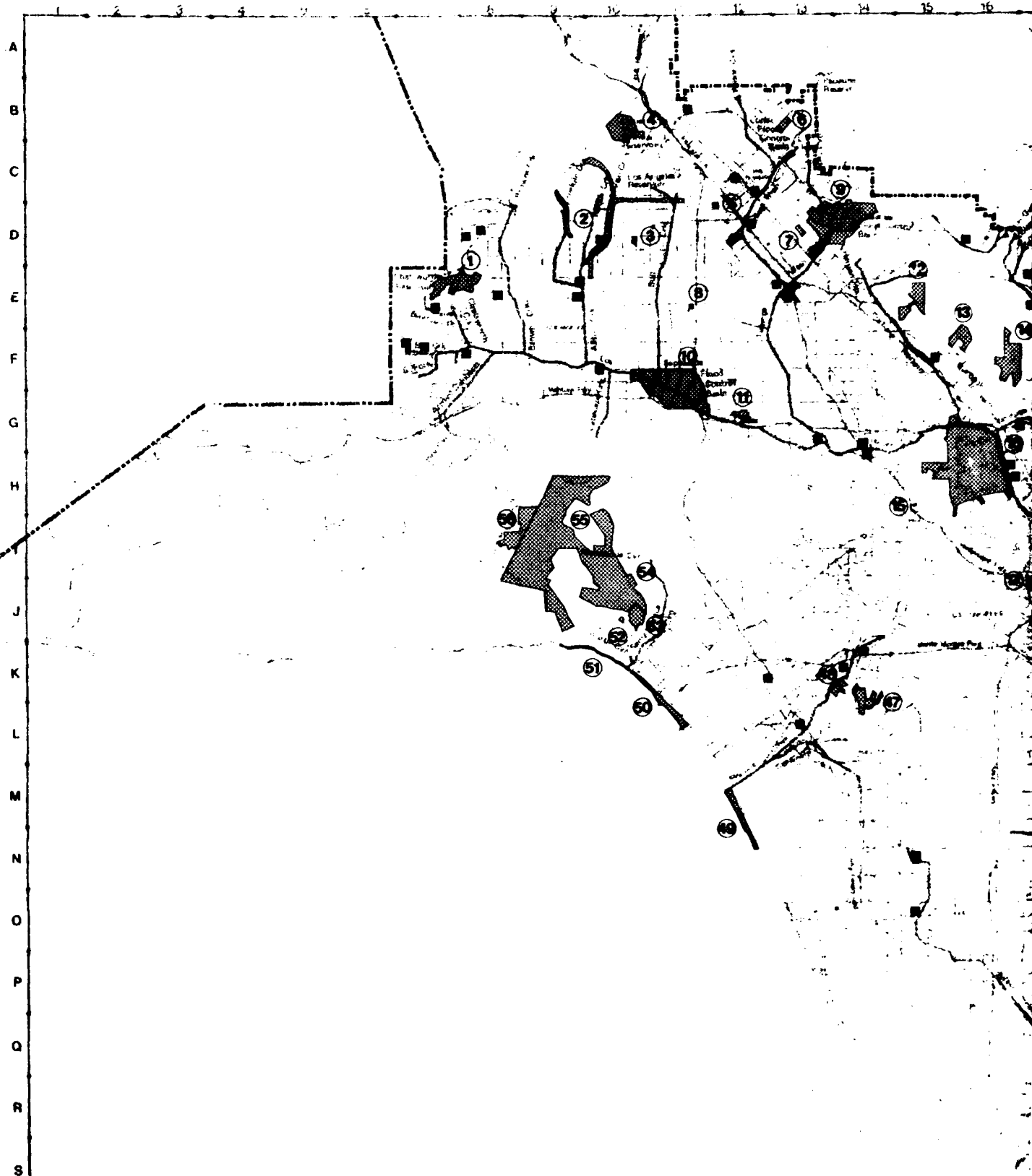
TABLE 3-2. COLLEGES AND UNIVERSITIES
(Key to Figure 3)

- | | |
|--|--|
| A. Pierce College | K. La Verne College |
| B. California State University, Northridge | L. Claremont Colleges |
| C. Los Angeles Valley College | M. California State Polytechnic University, Pomona |
| D. Glendale College | N. Mt. San Antonio College |
| E. Occidental College | O. Long Beach State University |
| F. Art Center College of Design | P. Compton College |
| G. Ambassador College | Q. El Camino College |
| H. California Institute of Technology | R. Los Angeles Southwest College |
| I. Pasadena City College | S. Loyola Marymount University |
| J. Citrus College | T. University of California, Los Angeles |

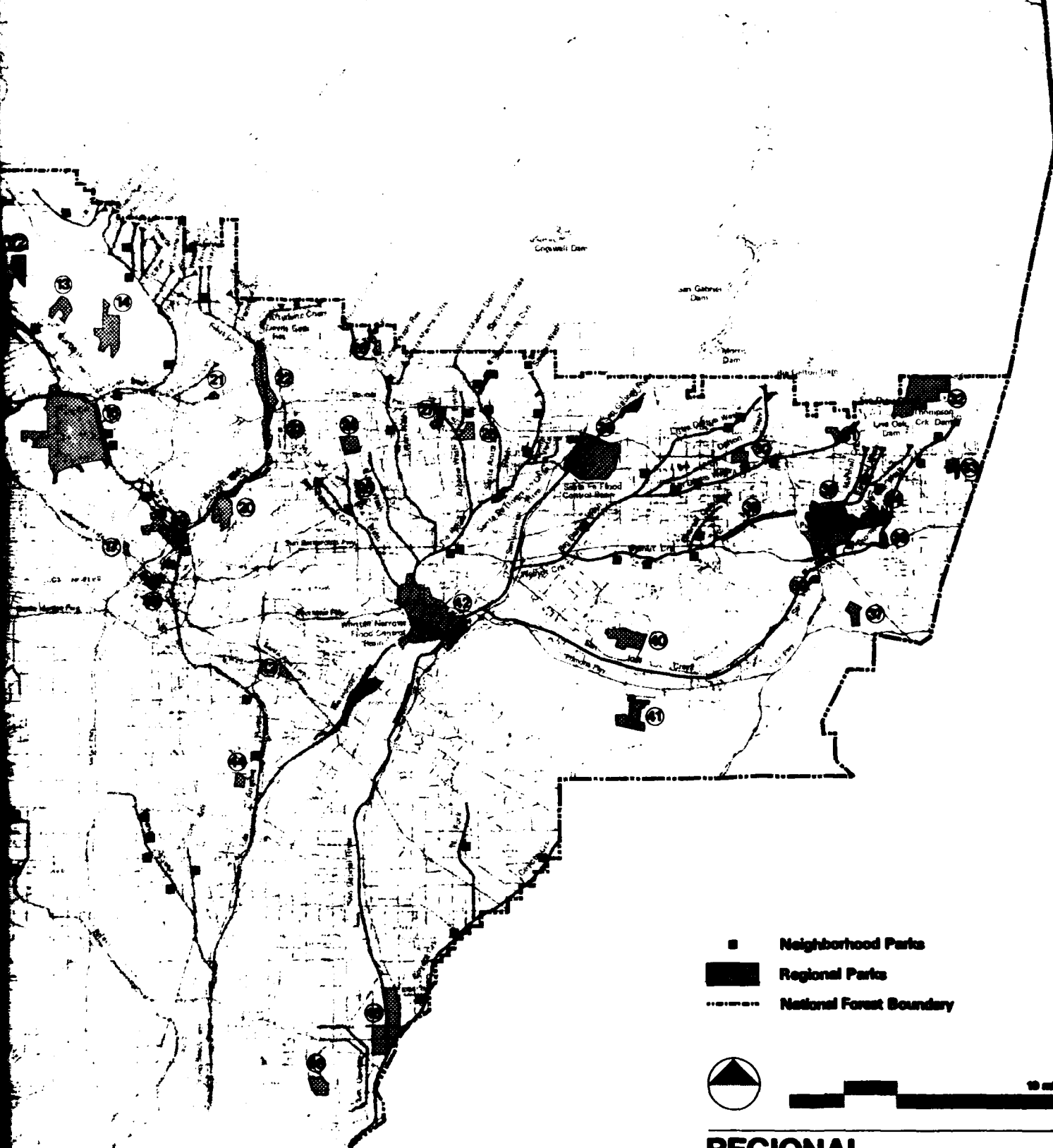
TABLE 3-3. SIGNIFICANT ECOLOGICAL AREAS
(Key to Figure 6)

The number given each area is the same as its number within the Los Angeles County Department of Regional Planning designation system for significant ecological areas.



- | | |
|--|---|
| 1. Malibu Coastline | 24. Tujunga Valley/Hansen Dam |
| 2. Point Dume | 25. San Dimas Canyon |
| 3. Zuma Canyon | 26. San Antonio Canyon Mouth |
| 4. Upper La Sierra Canyon | 27. Portuguese Bend Landslide |
| 5. Malibu Canyon/Malibu Lagoon | 28. El Segundo Dunes |
| 6. Las Virgenes | 29. Ballona Creek |
| 7. Hepatic Gulch | 30. Alamitos Bay |
| 8. Malibu Creek State Park Buffer Area | 31. Rolling Hills Canyons |
| 9. Cold Creek | 32. Agua Amarga Canyon |
| 10. Tuna Canyon | 33. Terminal Island |
| 11. Temescal-Rustic-Sullivan Canyons | 34. Palos Verdes Peninsula Coastline |
| 12. Palo Comado Canyon | 35. Harbor Lake Regional Park |
| 13. Chatsworth Reservoir | 36. Madrona Marsh |
| 14. Simi Hills | 37. Griffith Park |
| 15. Tonner Canyon/Clinic Hills | 39. Encino Reservoir |
| 16. Buzzard Peak/San Jose Hills | 40. Verdugo Mountains |
| 17. Powder Canyon/Puente Hills | 42. Whittier Narrows Dam County Recreation Area |
| 18. Way Hill | 43. Rio Hondo College Wildlife Sanctuary |
| 20. Santa Susana Mountains | 44. Sycamore and Turnbull Canyons |
| 21. Santa Susana Pass | 45. <i>Dudleya densiflora</i> Population |
| 22. Santa Fe Dam Floodplain | 62. <i>Galium grande</i> Population |



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**LACDA System
Recreation Study**



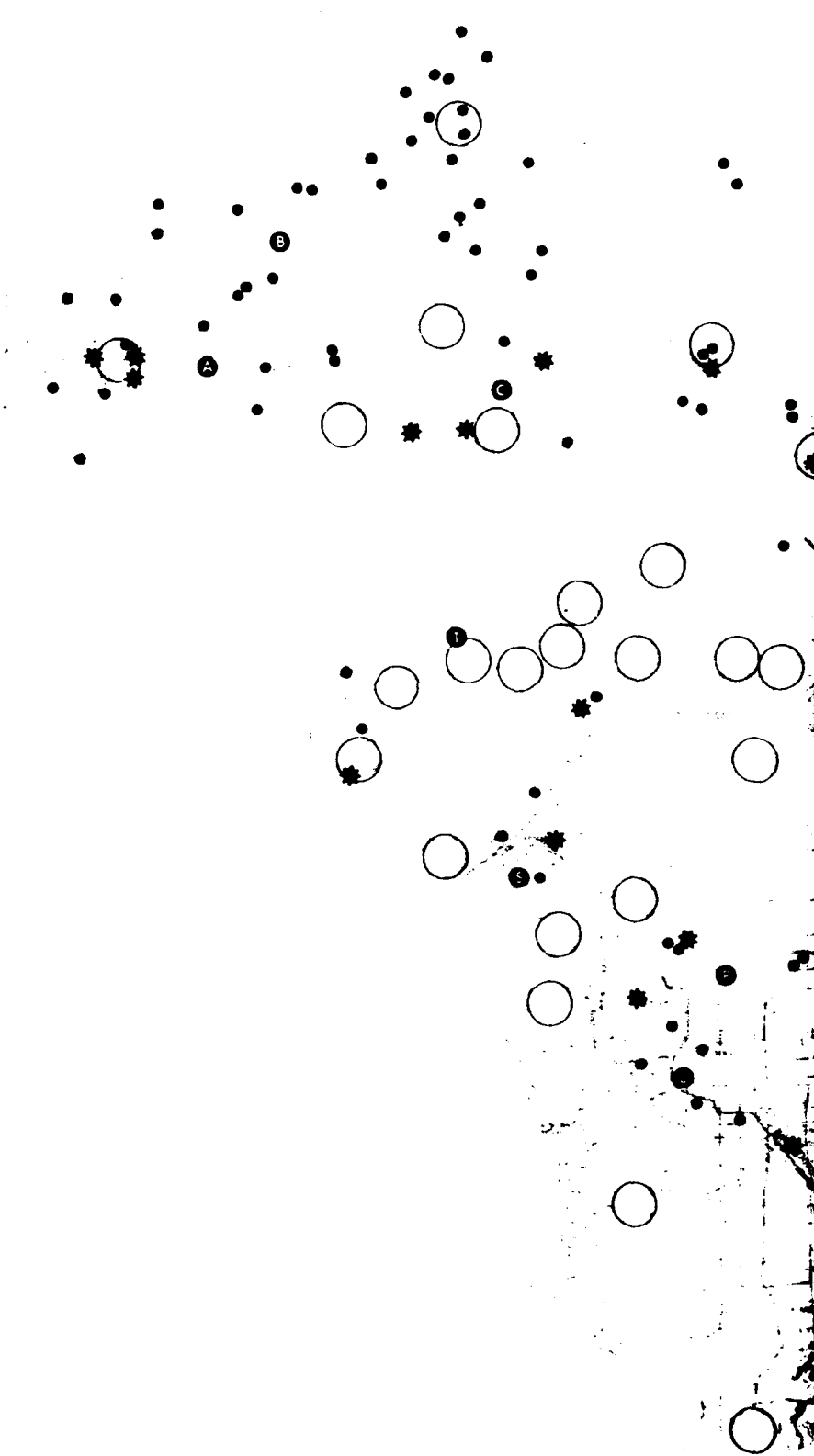
- Neighborhood Parks
- Regional Parks
- - - - - National Forest Boundary

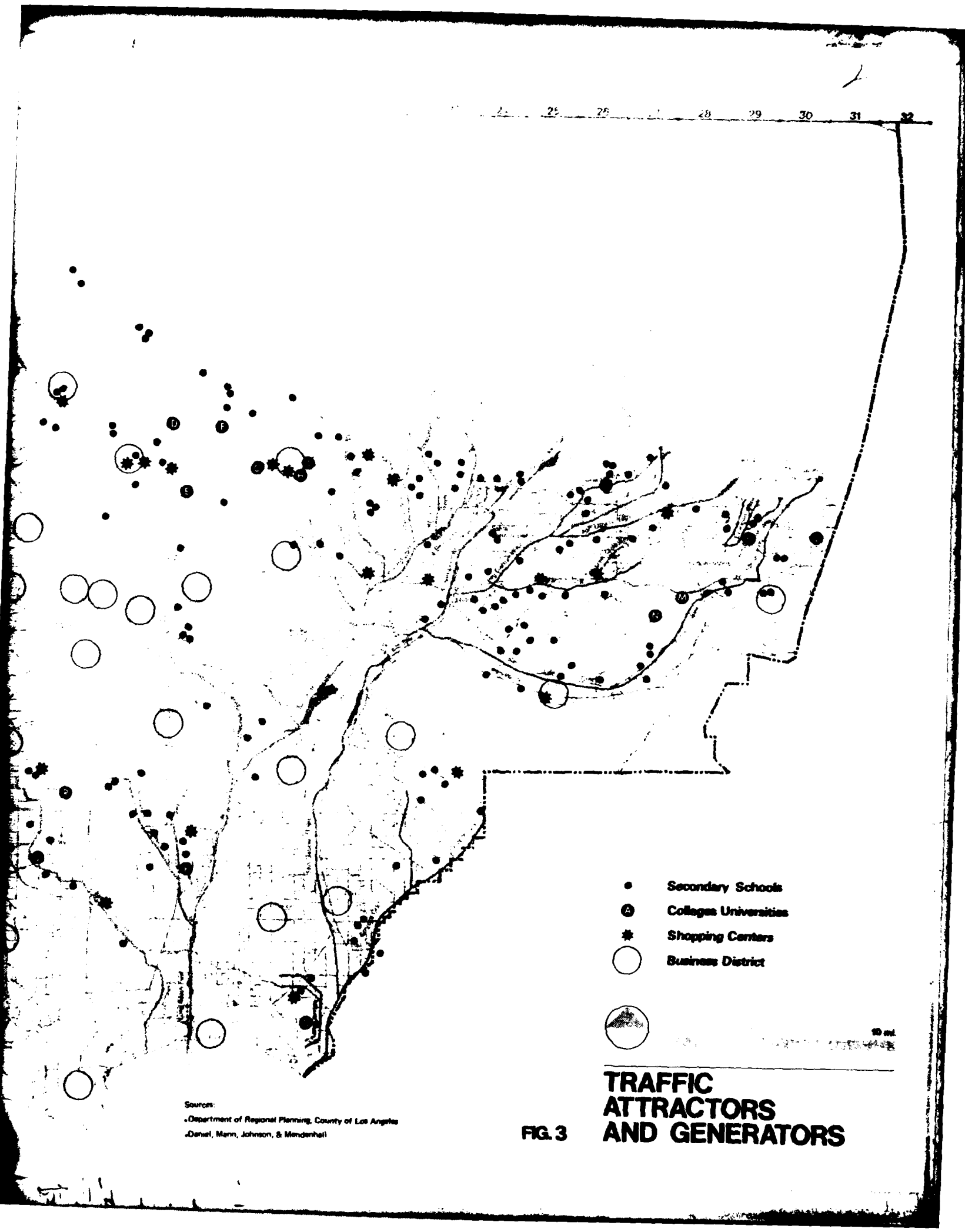
Source:
City, County, and State Parks & Recreation Departments

FIG. 2
REGIONAL RECREATION FACILITIES

1
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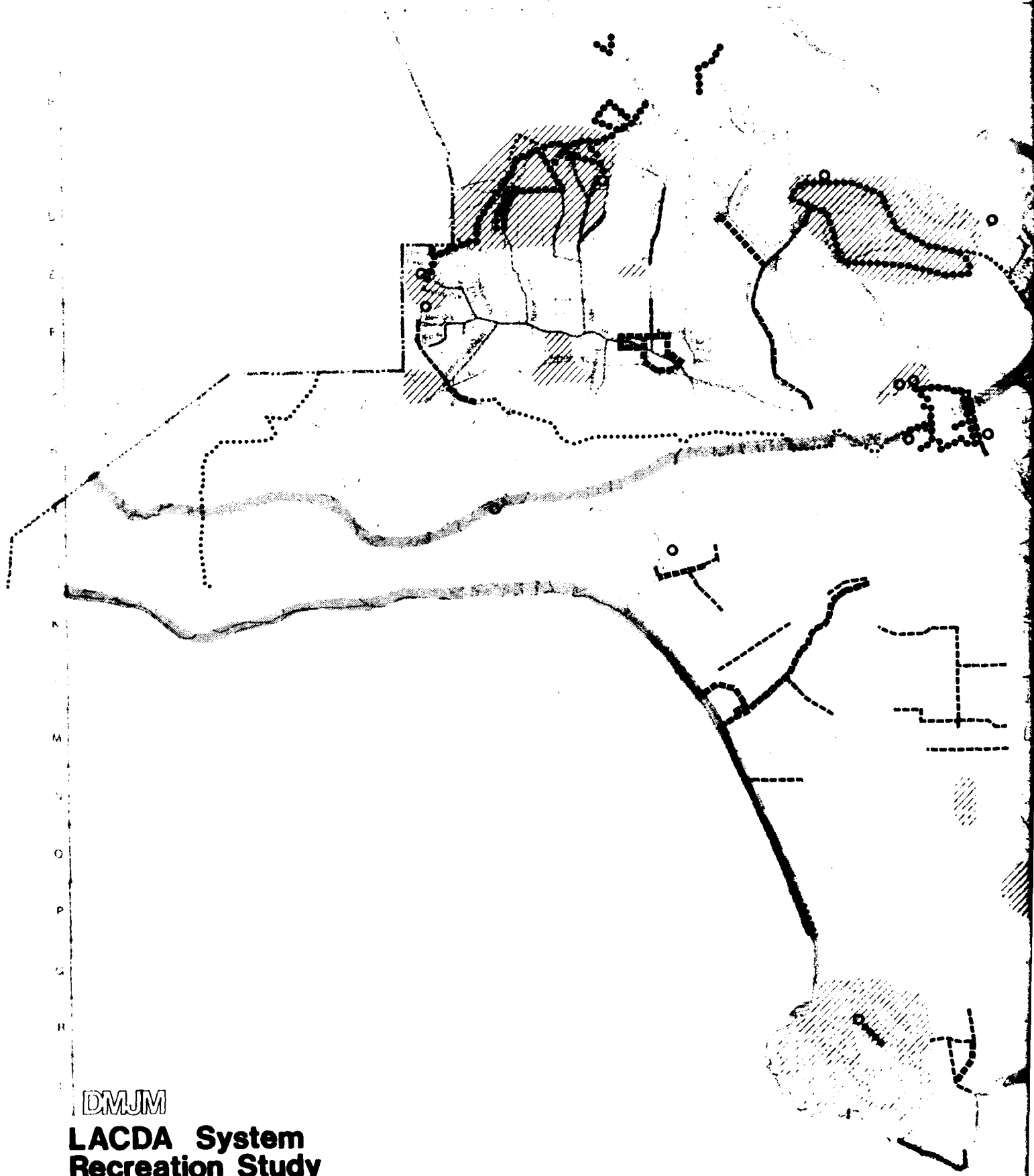


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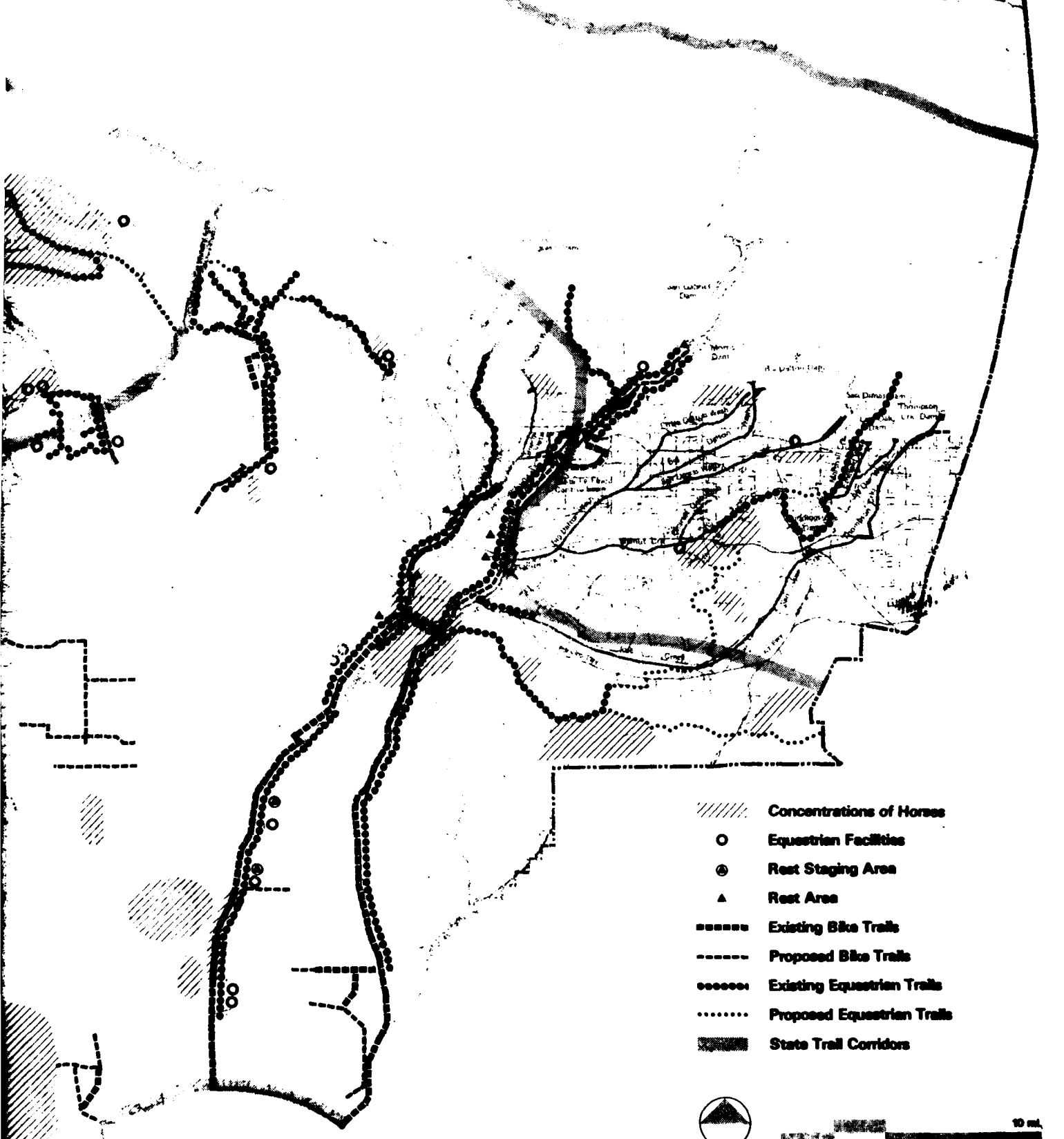
Sources:
- Department of Regional Planning, County of Los Angeles
- Deneel, Mann, Johnson, & Mendenhall

FIG. 3
TRAFFIC ATTRACTORS AND GENERATORS



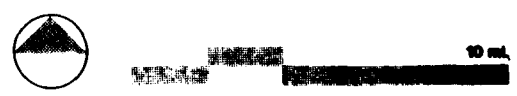
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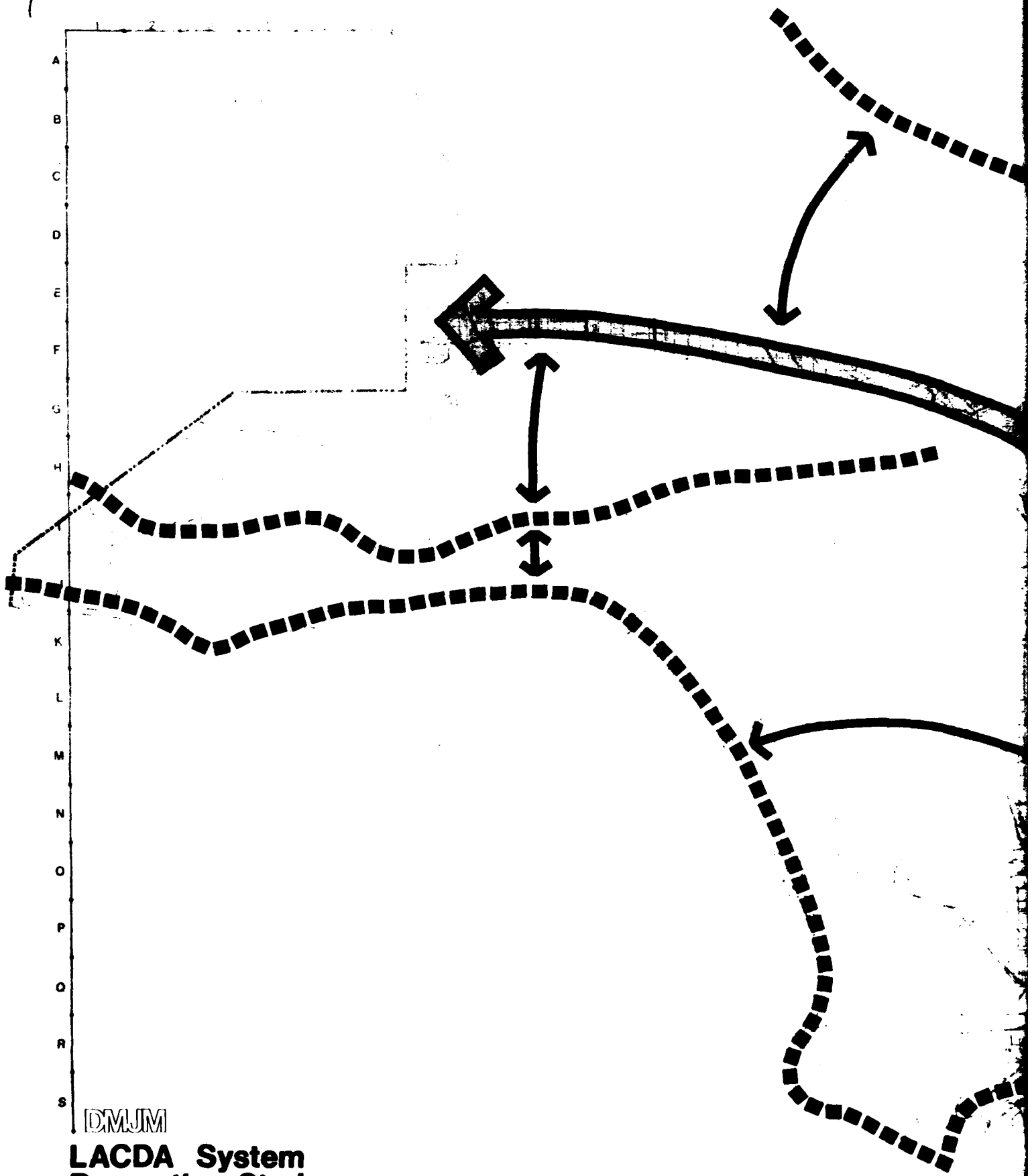
**LACDA System
Recreation Study**



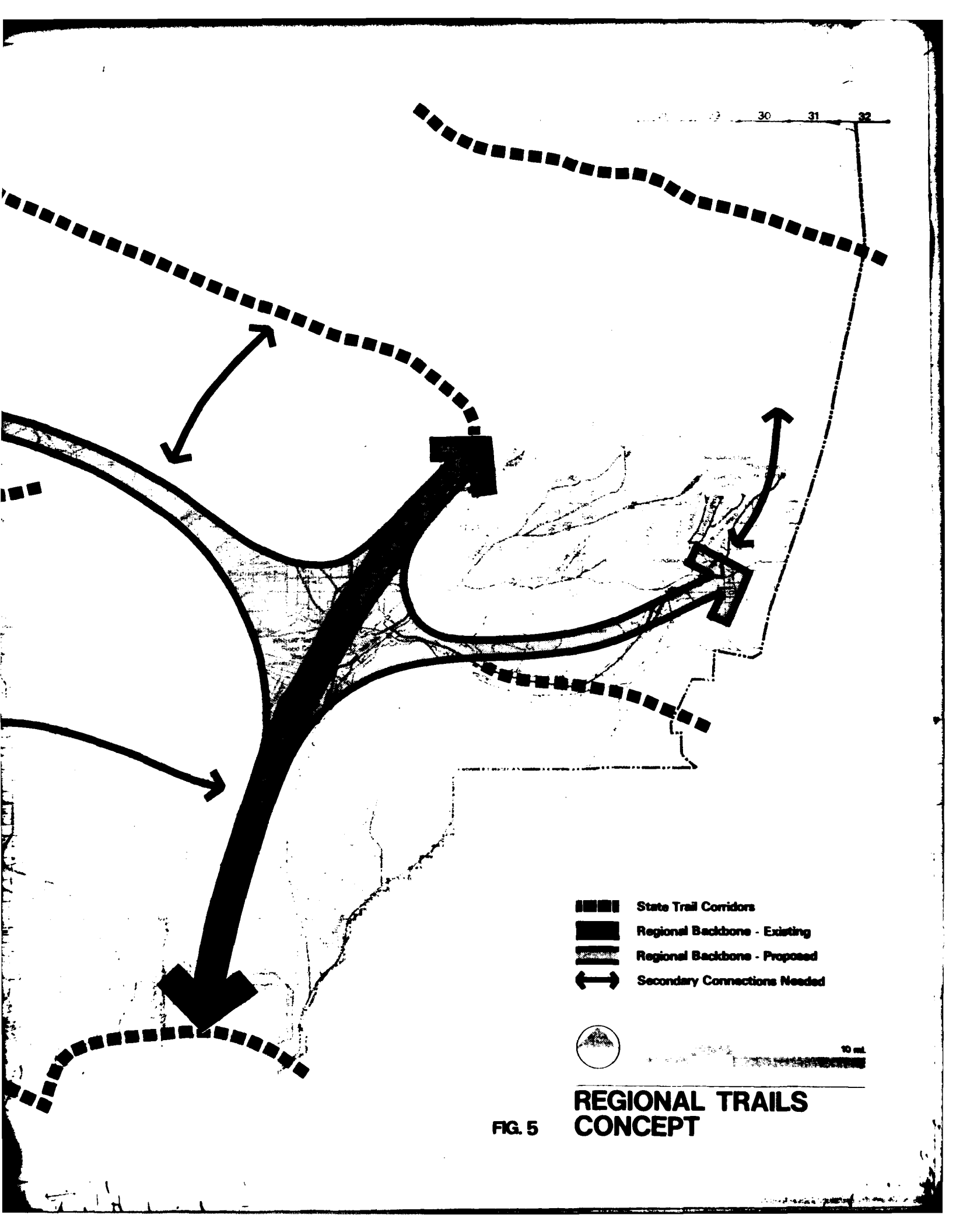
Source
 City, County, State Agencies
 (see list of agencies contacted, Appendix 4)

FIG 4 REGIONAL TRAILS





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**LACDA System
Recreation Study**

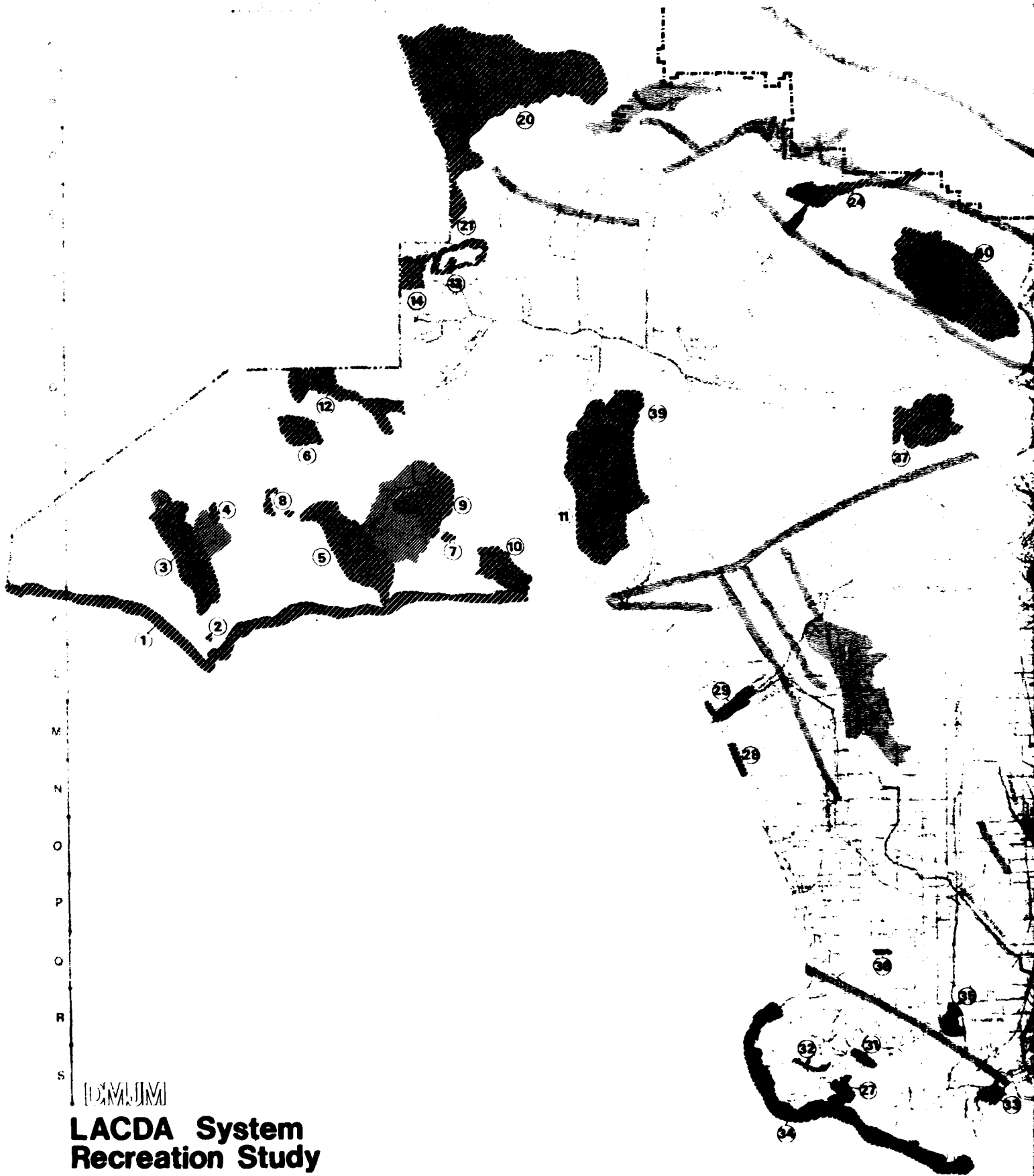


- ■ ■ ■ State Trail Corridors
- ▬▬▬ Regional Backbone - Existing
- ▬▬▬ Regional Backbone - Proposed
- ↔ Secondary Connections Needed



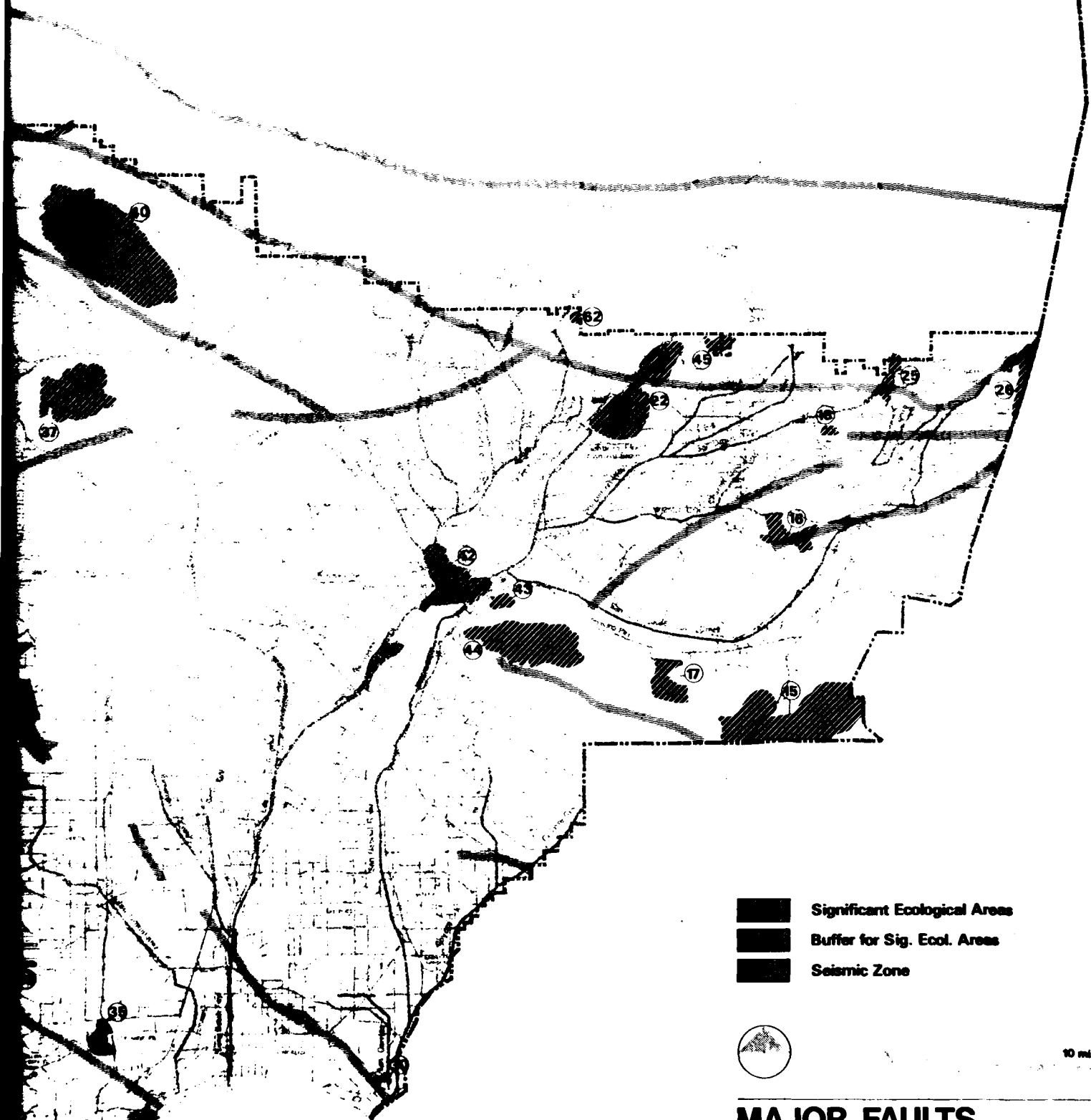
REGIONAL TRAILS CONCEPT

FIG. 5



[X M J M]

**LACDA System
Recreation Study**



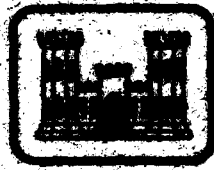
Source
Department of Regional Planning, County of Los Angeles

FIG. 6

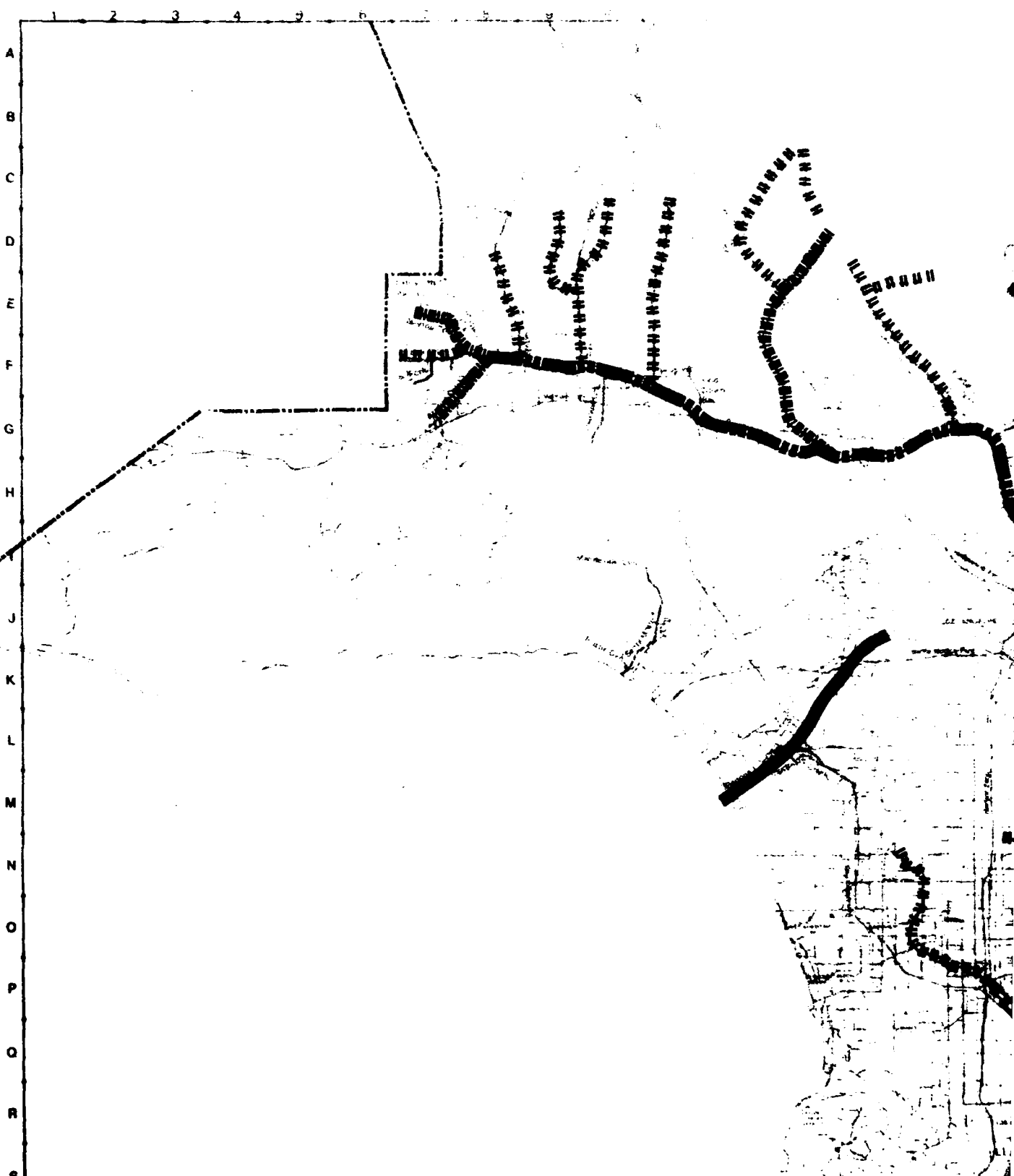
MAJOR FAULTS AND SIGNIFICANT ECOLOGICAL AREAS

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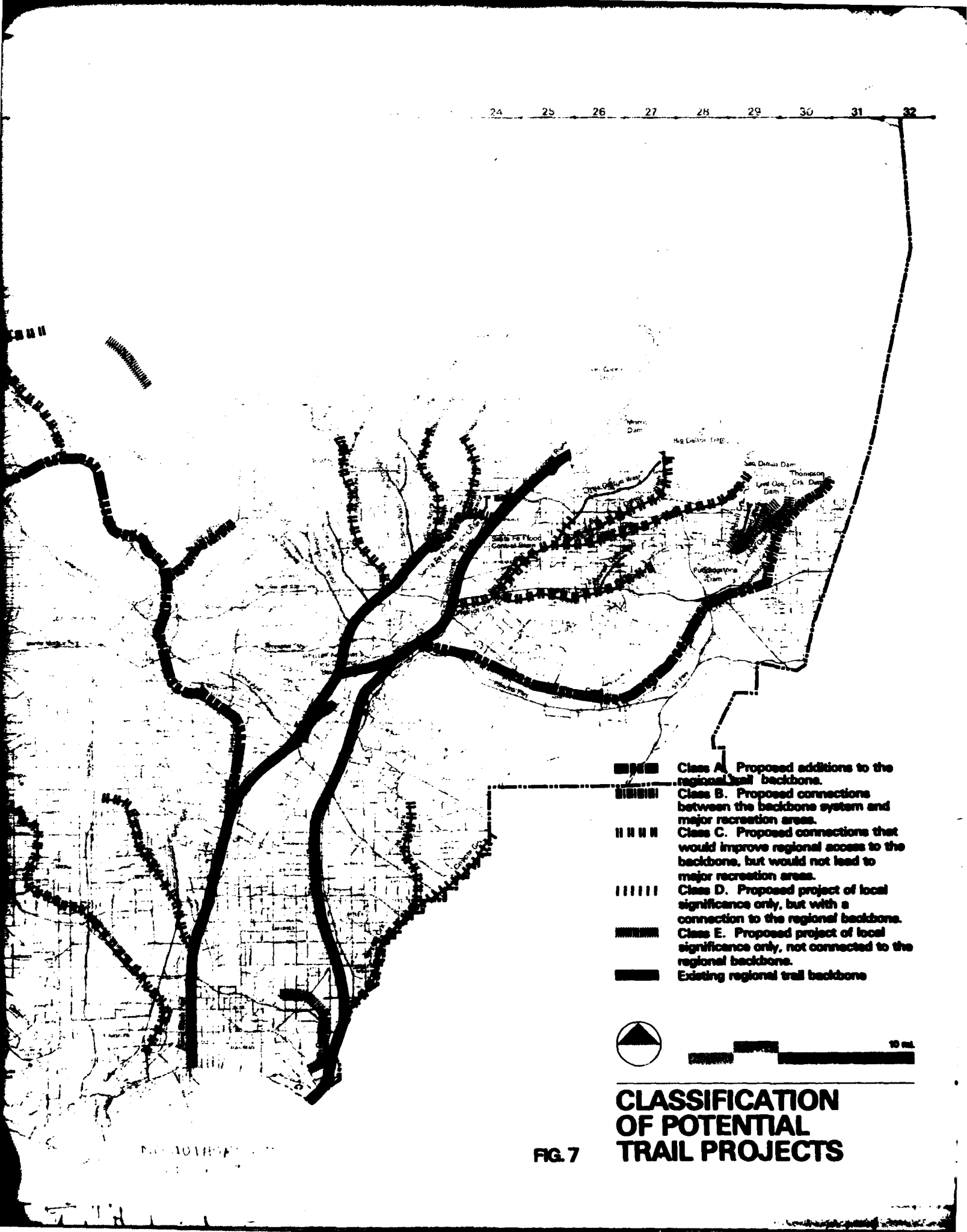


Chapter 4.
Potential Trail Projects



DMJM

**LACDA System
Recreation Study**



- ■ ■ ■ ■ Class A. Proposed additions to the regional trail backbone.
- ▤ ▤ ▤ ▤ ▤ Class B. Proposed connections between the backbone system and major recreation areas.
- ▥ ▥ ▥ ▥ ▥ Class C. Proposed connections that would improve regional access to the backbone, but would not lead to major recreation areas.
- ▧ ▧ ▧ ▧ ▧ Class D. Proposed project of local significance only, but with a connection to the regional backbone.
- ▨ ▨ ▨ ▨ ▨ Class E. Proposed project of local significance only, not connected to the regional backbone.
- ▩ ▩ ▩ ▩ ▩ Existing regional trail backbone



CLASSIFICATION OF POTENTIAL TRAIL PROJECTS

FIG. 7

NO. 10187

CHAPTER 4 POTENTIAL TRAIL PROJECTS

The extensive length of the LACDA channel system and the distribution of channels throughout the Los Angeles region give the system great potential for contributing to the development of a regional network of trails for bicyclists and equestrians. Such a trail network, however, would be expensive to construct because of frequent obstructions to corridor rights-of-way in the urban area.

General concepts related to the planning and design of trail projects are discussed below. These are followed by descriptions of potential channel projects that could comprise a regional trail system for bicyclists and equestrians.

PLANNING AND DESIGN OF TRAIL PROJECTS

CLASSIFICATION OF POTENTIAL TRAIL PROJECTS

Information from the field survey of the channel system (see Appendix 1) was used to determine those channels that have suitable space for trails within their rights-of-way. Such suitability required either sufficient access space along the side of the channel, or a reasonably wide channel floor with a flat, paved bottom that remains dry most of the year. Those channels found to have such characteristics were then classified on the basis of their ability to satisfy regional trail system needs. These needs, which were discussed in Chapter 3 and summarized in Figure 5, form the basis for the classification system used here.

The purpose of this classification system is to indicate those channels that should receive priority for development, based on the goal of completing a regional trail system for bicyclists and equestrians. Such a trail network would be structured around regional backbone¹

¹ The regional "backbone" system proposed here should not be confused with local trail backbones, such as the City of Los Angeles' bicycle backbone system or the city's Twelfth District backbone equestrian trail. The term is commonly used to indicate a network of trails that serves as the base of a larger system of secondary and tertiary connectors.

trails that would permit easy movement through the urban area, would be readily accessible to a large amount of the area's population, and would provide access to major recreational facilities or to trails connecting to such facilities. Secondary trails connecting to the backbone would be classified according to their regional significance and their ability to extend the usefulness of the backbone.

Each channel was placed in one of the following classes, based on the function it would best serve within the regional system (see Figure 7):

- Class A – Proposed additions to the regional trail backbone (the LARIO and San Gabriel trails form an existing north-south regional backbone, connecting the San Gabriel Mountains to the south coast at Long Beach)
- Class B – Proposed connections between the backbone system and major recreational areas
- Class C – Proposed connections that would improve regional access to the backbone, but would not lead to major recreational areas
- Class D – Proposed projects of local significance only, but with a connection to the regional backbone
- Class E – Proposed projects of local significance only, not connected to the regional backbone.

In determining which of the channels in an area would best function as a part of the backbone or as a major connector, it was necessary to compare the channels on the basis of their relative suitability for trail development. The following factors were used to judge this suitability:

- The location and alignment of a channel relative to the trail needs of an area
- The number and kinds of obstructions along the route (principal items in determining the cost of a project)

- The proximity of other channels or other trail corridors, and their relative ability to perform the same function within the regional trail scheme as that of the channel being considered
- Recreational facilities and traffic destinations (schools, shopping centers, etc.) along the route.

Beyond the basic standards for trail design discussed in Chapter 2, it was not possible, given the number of variables within each of these factors, to develop rigid criteria based on the factors for classifying or comparing potential trail projects. Instead, it was necessary to evaluate each channel on a case-by-case basis, weighing its physical suitability for trails against the need for trails in that area and the availability of suitable options.

As a result, a channel may be classed in an A or B category despite numerous obstructions or marginal access, if there is a great need for a regional trail in that area and no suitable options. Similarly, a C or D rating might be given despite relative ease of development, if other trail corridors in the area would serve regional purposes better.

The scope of this project did not allow more than a cursory consideration of nonchannel trail corridors. Exception was made in cases where certain corridors had obvious potential, or where there were obstacles along channel routes that necessitated detours from the channel right-of-way. Also, there was generally very little information available from other agencies about routes designated by those agencies as potential trail corridors. Many of these routes are tentative and have not been studied in detail.

The classifications given here, therefore, are based generally on the use of channel rights-of-way for regional trails, whenever channels exist in suitable locations and have sufficient potential for accommodating trails. However, close coordination with local agencies is recommended when trail projects are planned in order to ensure that better routes are not overlooked.

Class A Projects

Trails along the Los Angeles and San Jose Rivers would extend the proposed regional trail backbone west and east from the existing LARIO and San Gabriel Trails. The regional trail system would then link the Sepulveda Recreational Area, Griffith Park, the central urban area, the south central industrial area, the south coast at Long Beach, the Whittier Narrows Recreational Area, the Santa Fe Dam Recreational Area, the vicinity of

the Puddingstone Recreational Area, and the Angeles National Forest. These channels would extend the regional trail system to the large populations of the San Fernando Valley and the central Los Angeles area, as well as to the rapidly developing eastern San Gabriel Valley area.

Los Angeles River trails are included as Class A projects despite major segments with numerous obstructions or insufficient space along the channel side for trails. These trails would be expensive to develop and would require use of the channel floor for extended distances in some places. The Class A rating reflects both the great need for an extension of the regional trail system into the heavily populated central city and San Fernando Valley areas and the lack of alternative routes. Any major gaps in the Los Angeles River trails that could not be circumvented using other trail corridors would separate the eastern and western halves of the region, and would prevent the completion of a truly regional trail system.

Either San Jose Creek or Walnut Creek could serve as an eastern extension of the backbone system. The area along Walnut Creek currently has a larger population, and Walnut Creek would provide a more direct route to Puddingstone. San Jose Creek, however, would extend the backbone farther to the east and ultimately would serve as large a population as Walnut Creek due to the rapid development occurring along it. This route also has less frequent obstructions.

Class B Projects

Channels with Class B trails would connect the backbone system to the following major recreational areas: Hansen Dam (Tujunga Wash), Arroyo Seco Park System, the proposed Devil's Gate Recreational Area (Arroyo Seco), the San Gabriel Mountains (Arroyo Seco and Thompson Creek), Santa Monica Mountains (Arroyo Calabasas), and the proposed Chatsworth Recreational Area (Dayton/Chatsworth/Bell Creek Channel system). Together, Arroyo Calabasas and the Dayton/Chatsworth/Bell system would connect the extensive equestrian trail system in the western San Fernando Valley with proposed equestrian trails in the Santa Monica Mountains. Such a connection is currently a major goal of equestrians in that area.

Buena Vista/Santa Fe Diversion Channel trails would provide a much needed connection between the LARIO and San Gabriel trails and would complete a major trail loop.

Most of the Class B trails would greatly increase the area and population served by the regional trail system. They would also improve access to the backbone system, thus increasing the usefulness of those trails.

Walnut Creek is not proposed as a Class B connector to the Puddingstone Recreational Area, because it is obstructed frequently. (One of the obstructions is a shopping center that covers the channel for a long distance.) In addition, the San Jose Creek trails would bring riders to the vicinity of Puddingstone, from which local trails or city streets could be used to reach the park.

Similarly, Caballero Creek is not recommended as a major connector to the Santa Monica Mountains because of frequent obstructions.

Class C Projects

The Class C projects would extend access to the regional trail system to a significantly larger area. However, these projects would not provide through routes between major points or connect major recreational areas to the backbone system.

The Class C channels are often recommended for either bicycle or equestrian trails rather than both, since the local areas served may not have both needs.

Among the bicycle projects in this class, Coyote Creek/ Coyote Creek North Fork and Laguna Dominguez have the most evident potential. Both would be lengthy trails serving large areas. Coyote Creek/North Fork is especially appealing because of its trapezoidal section; Laguna Dominguez is also trapezoidal for about half its length. Both of these projects would provide transportation routes to schools and businesses, and would improve bicycle access to the coastal area from heavily populated regions.

The Laguna Dominguez project would have a much greater regional significance if a connection were completed from its terminus in Hawthorne to the Ballona Creek Bicycle Trail. This would achieve a much needed crosstown route through the heavily urbanized area between the LARIO backbone and the South Bay Bicycle Trail.

The Burbank Western/La Tuna Canyon/Hansen Heights equestrian trail would provide access to Griffith Park from an area of heavy equestrian use, and from Griffith

Park to the Verdugo Mountain trail system. It is also likely that a major equestrian loop could be developed incorporating this trail, the Tujunga Wash, part of the Los Angeles River, Griffith Park, and Hansen Dam, with connections to the Verdugo Mountains and San Gabriel Mountain trail systems.

Other attractive equestrian projects in this class include trails along Brown, Aliso, Limekiln, and Sawpit channels. These trails would serve a large number of equestrians in those areas and would create trail loops improving the use of local trail systems.

Bull Creek trails would provide improved equestrian and bicycle access to the Sepulveda Basin Recreational Area.

Class D and E Projects

Class D and E projects would have no regional significance but could provide trails useful for local transportation or recreational purposes. Class D projects would provide locally beneficial access to the regional system, but the number of people affected would not be significant regionally.

All of the Class D and E projects are bicycle trails except the equestrian trail on the upper Verdugo Wash. These potential projects are short and are usually located in urban areas where they would be of little benefit to equestrians. The bicycle trails, while short, might serve useful transportation or recreational purposes in local urban areas.

The classification system used here reflects the study's focus on regional priorities. However, this does not indicate that projects serving only local needs might not be attractive to individual communities and have high local priorities within those communities. While the Corps' planning efforts should have a regional focus, smaller projects initiated at a local level and having strong local support should be considered carefully, particularly those with possible application in other parts of the system.

Smaller segments of many Class A, B, and C projects would make excellent local projects, even if the remainder of the regional trail were not built. Such projects might be built as the first phase of the larger development. Segments of the Laguna Dominguez Bicycle Trail would provide excellent commuter routes to the Datsun office complex north of Main Street, to El Camino College, or to the Northrop complex in

Hawthorne. Many sections of the Los Angeles River could be used as local commuter routes, or as bicycle routes to commercial areas. The La Tuna Canyon channel, separate from its Burbank western connection, would provide a much needed local trail for equestrians. Riders in this area must now walk their horses along the side of La Tuna Canyon Road, which carries heavy auto traffic. Many similar local projects could be structured from other proposed regional trail projects.

BICYCLE TRAILS

A basic fact to be considered in the design of bicycle trails is that the city streets always offer an alternative to their use. The main advantages that a trail offers over the use of streets are separation from traffic and fewer delays due to traffic lights and stop signs. The streets are almost always more direct, however, and the bicyclist will weigh the advantages of separation from traffic and time saved en route against the time required to get to and from the trail. The aesthetics of the trail relative to those of the alternative streets are also a significant consideration.

There are three main categories of users of bicycle trails:

- Serious recreational bicyclists who make frequent long-distance trips. This group, which includes organized bicycle clubs, generally consists of highly skilled bicyclists who ride comfortably and safely in automobile traffic. These riders will use off-street trails only when they are very convenient, offer obvious advantages in reduced obstruction to travel, lead to desirable destinations such as major recreational areas, and offer easy access to restaurants or food stands. They almost always ride with a specific destination in mind rather than only for the bicycling experience itself.
- Less avid or less skilled cyclists who make shorter trips, principally on weekends, for shopping or recreation. These riders are more concerned about separation from traffic and are apt to go farther out of their way to make use of a bicycle trail. Though they usually ride with a specific destination in mind, they are the only one of the three groups likely to take leisurely rides. For example, a family with children might use the trail with no specific destination in mind.
- Commuters bicycling to work or to school. There has been increasing emphasis recently on providing bicycle trails for commuters in order to offer an alternative to automobile travel. Ideally, bicycle trails would

be located to serve both recreational riders and commuters, providing rapid through transit of an area for both, and access to schools and businesses as well as recreational facilities.

The following conclusions can be drawn regarding the planning of bicycle trails for these three groups of users:

- Trails should be of sufficient length to make the time needed to gain access to them worthwhile and they should include major destination points along their length for both recreational users and commuters. Trails that are short and do not lead to desirable destinations generally will seldom be used.
- In deciding whether a bicycle trail should be built along a channel, careful consideration should be given to alternative street routes in the area. If adjacent streets afford safe and easy travel to cyclists, the trail probably would not be heavily used. Such consideration would require a certain amount of coordination among planners from different agencies.
- In order for commuting by bicycle to be regarded as a serious option by a significant number of people, it probably will be necessary to provide shower facilities for cyclists. It will also be necessary to provide improved methods of securing bicycles, such as lockers or vertical racks. Security must be given adequate consideration in the design of any facility intended for use by bicyclists, either for recreation or commuting.

The *Bikeway Design Atlas* (Ref 4-1) is recommended as an excellent source of ideas and information on urban bicycle paths.

EQUESTRIAN TRAILS

The situation facing equestrians with regard to the use of separated trails is very much different from that described for bicyclists. The equestrian has little or no alternative to the separated trail, since the use of city streets by horses is impractical for more than short distances.

Rapid urbanization, and particularly the construction of freeways and flood channels, has created impassable barriers that have made much of the previously existing regional trail system of Los Angeles County unusable. Owners of horses in specially zoned equestrian areas find themselves increasingly isolated from trails of any significant length by surrounding development. They are forced to resort to trailering horses to places where

good bridle paths exist. As a result, horse ownership in many of these areas has declined steadily in recent years.

A trail system that would permit travel through the entire region could have a major effect on equestrian activity in the area. The trails proposed here for the LACDA channel system would form an effective regional network, linking areas of equestrian ownership, major equestrian centers, and all of the major trail systems of the area, including existing and proposed trail systems in the western San Fernando Valley, the Santa Monica Mountains, Verdugo Hills, the San Gabriel Mountains, and the San Gabriel Valley.

While the concept has never been adopted by any agency, proposals have been made for the development of a Rim-of-the-Valley equestrian trail that would circle the San Fernando Valley (Ref 4-2). Mulholland Drive or the Los Angeles River would serve as the base for this system, which would link trails in the western San Fernando Valley, the Hansen Dam area, La Tuna Canyon, the Verdugo Mountains, the San Rafael Mountains, and the Arroyo Seco. Channels that might be included in this trail system are the Los Angeles River, Arroyo Calabasas, Bell Creek, Chatsworth Creek, Dayton Creek, Hansen Heights, La Tuna Canyon, the upper Verdugo Wash, Winery, Flint, and the Arroyo Seco.

Because there is such a need for through routes for equestrian travel, and because of the lack of any alternative such as the streets, equestrians are often willing to tolerate trail conditions far less than ideal in order to ride to an area where there are good trail systems. As long as the distance is not excessive, use of a poor trail is generally preferable to trailering horses. This is an important consideration, since several segments of the trail system proposed (especially along the Los Angeles River) require travel on the channel floor for extended periods of time. Travel on the floor is undesirable because views are restricted by the channel walls and because the channel floor itself is sometimes unappealing aesthetically.

The major problem in the proposed equestrian trail system is that segment of the Los Angeles River from Atlantic Boulevard north to Figueroa Street. Part of this distance would be along a concrete bench cut into the side of the channel, and 6.3 miles would be on the floor of the channel. This 6.3 miles would require from two to four hours to travel, depending on the kind of surfacing used for the trail. This segment of the trail would have low visual appeal, and lack of space along the sides would require that rest stops be limited to minimal facilities.

The justification for including such a long length of trail in such an undesirable setting is that this segment is necessary to link the western half of the system to the eastern half. It is also necessary to complete a through trip across the regional area from the San Fernando Valley to the southern coast or to the southeast into Orange County.

An alternative to travel on the channel floor for the length of this segment might be the use of a rail shuttle for equestrians, since the Los Angeles rail yards lie along this portion of the river. This idea is discussed in the Los Angeles River trail project descriptions, which follow later in this chapter.

Based on numerous complaints and reports of injuries heard during the course of this analysis, it would appear that further study is needed by recreational planners to improve the safety of equestrian facilities used in the channel system. The most frequent complaints concerned dirt ramps leading to the channel floor and river crossings where horses must wade across the channel. Studies should be done to determine: how ramps could be designed to afford riders the most safety; what kinds of surfacing would provide the best footing on concrete ramps cut into the channel side; and whether some kind of fencing along the upper part of the ramps (possibly a breakaway type that would not obstruct flood flows) could be used to break the fall of a rider thrown on a ramp. Study is also needed to find methods of improving footing at river crossings. The growth of algae on concrete surfaces can make these crossings very slippery and dangerous to riders.

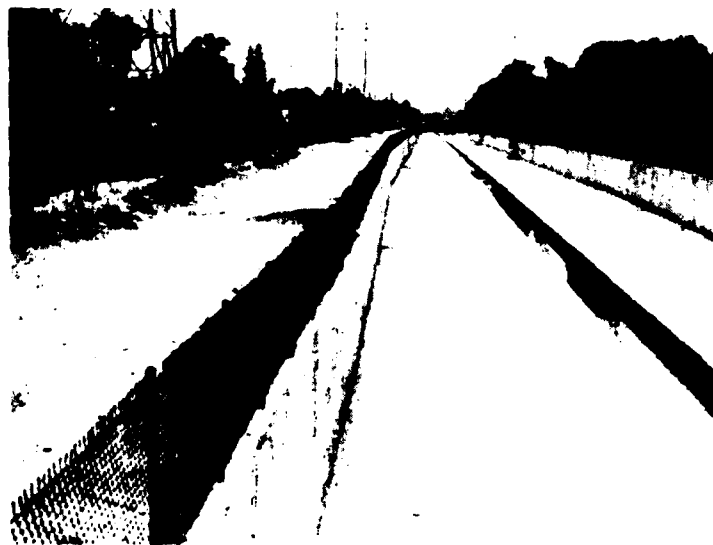
Finally, there are frequent complaints of tunnels being too small for safe passage. The tunnel into Griffith Park north of Los Feliz, for example, is about 9 feet high and 9-1/2 feet wide. A frightened horse can throw a rider against the wall or ceiling of the tunnel. Tunnels should be 12 feet high and 12 feet wide whenever possible.

USE OF THE CHANNEL FLOOR FOR TRAILS

Since rainfall in the Los Angeles area is very seasonal, the volume of water that flows through the channels varies greatly throughout the year. During most of the year, flows in the larger channels are small and are contained entirely within low-flow channels along the center of the channel floor, leaving most of the floor dry and available for other uses. These larger channels, particularly those with trapezoidal sections, are generally wide enough to prevent the rider from having an unpleasantly constricted feeling in them.



Equestrian ramp near Griffith Park on the Los Angeles River.



The Aliso Creek Channel is an example of a channel floor with good potential for trail use or other recreational activity.

The smaller channels often have no low-flow structures. They carry no appreciable amounts of water during most of the year but always contain small amounts of "nuisance" flow from sources such as local irrigation runoff. These small flows are sufficient to keep the channel floor (usually called the invert) wet and slippery with algae in many places. Many of the smaller channels are also narrow enough to create an unpleasant tunnel-like atmosphere for the rider.

Use of the invert for recreational purposes has been rare in the past and generally has been discouraged by flood control officials. The following factors must be considered when planning for such use:

- Any recreational use of the channel floor would be interrupted for several weeks each year during peak water flows. During such periods, it would be necessary for bicyclists to use city streets to detour around the obstructed section, and equestrians would not be able to use the trail at all. The amount of time during which a section of trail would be unusable would vary at different locations. A brief analysis of 1977 flow data indicates that the invert of the Los Angeles River near Vineland would have been unusable for about seven days from October 1976 to September 1977. The invert of the Los Angeles River near Downey would have been unusable for 18 days during that same period.
- Such use could not require any structure or modification that would interfere with the flood control function of the channel.
- Safety procedures would be required to ensure careful coordination among operational and maintenance personnel, so that trails would be closed and the invert inspected before release of water into the channel. This is particularly important in the case of vertical channels, since the vertical walls could prevent escape from the channel floor.
- Riders' views from the invert would be restricted by the channel walls, thus reducing the quality of the recreational experience afforded by the trail. In some places (primarily where no low-flow channel exists), dampness, growths of algae, deposits of silt and debris, garbage, and odors create an unpleasant atmosphere.

While the use of the invert is not desirable, there appears to be no reason why it should not be considered in cases where there is no apparent alternative. However, further study is needed to establish the feasibility of the idea. In order to determine the amount of time

during the year that a trail would be closed, water flow data for a period of several years should be examined at each location where use of the invert is being considered. An analysis should be done to determine whether there is ever enough water released by local sources downstream of the Corps' dams to interfere with use of the trails or to create a hazard to trail users. The Corps has no knowledge or control of such releases, and if the closing of trails were necessary, it would not be possible now to coordinate with the agencies responsible. Such releases are generally insignificant compared to releases of water from the dams, and they are not expected to be a problem. However, any major sources of large flows should be identified, and responsible agencies should be requested to provide warnings of such releases. Use of the invert for trails should be kept to a minimum to avoid the need for extensive coordination and closing of trails before releases of water.

Where use of the invert is necessary, it is recommended that a three-inch paving strip be used for the trail if there is a low-flow channel, and a six-inch strip if there is not. The strip would keep riders above accumulations of silt and debris and nuisance flows from wall outlets. Concrete probably would be better for this purpose than asphalt, since it could be bonded better to the channel floor. It is possible that asphalt paving might separate from the floor and break apart when inundated. Tests should be conducted to determine the best materials and methods of bonding for this purpose.

A study is also needed to determine the best method of surfacing the paving strip to make it suitable for equestrian use. A textured concrete surface could be used for short distances. For longer distances, however, such as the 1.3- and 6.3-mile segments required for the Los Angeles River trail, a concrete surface would slow the horses considerably and could cause damage to their hooves or legs. It might be possible to design a shallow concrete trough with a grooved surface for drainage that would trap silt during periods of inundation, so that travel would be on the silt layer rather than directly on the concrete. Alternatively, the concrete surface might be covered two or three times a year with silt scraped from the channel floor or with dirt.

It would be necessary for recommended trails in the invert of the Los Angeles River to cross the low-flow channel in at least two places. Since the low-flow channel is shallow in these places, it probably would be possible for horses to walk across it. Bicyclists, however, would require a bridge of some kind for the crossing; studies should be done to develop such a design. If it

is not possible to bridge the low-flow channel, it would be necessary for bicyclists to use city streets to detour around this three-quarter-mile section of channel.

Since most of the wear in a flood channel occurs in the low-flow section, it is necessary to rebuild the low-flow channels periodically, in some cases as often as every 10 to 20 years. In areas where trails are placed in the invert, consideration might be given to enlarging the low-flow channels when such reconstruction occurs. This would reduce the amount of time each year when the trails could not be used.

Measures should be taken whenever possible to mitigate the aesthetic impact of the generally poor recreational environment that the invert affords. Murals might be placed on channel walls, especially at points of entry to the invert. Trailing plants grown along the side of the channel and cascaded down the channel walls would alleviate the visual effects of the concrete.

AESTHETIC CONSIDERATIONS AND SIGNING

Aesthetic improvements, including landscaping, attractive signs, inviting rest and entry areas, and murals in appropriate places along channel walls, should be emphasized in the development of a trail network within the channel rights-of-way. Such improvements would serve two purposes:

- To encourage use of the trails.

The channels themselves are a generally unappealing visual feature of the proposed trail system. However, given the desirability of the channel system for trail use from other points of view, and the apparent inevitability of its use due to the lack of alternatives in many places, a commitment should be made to providing as pleasant an experience as possible for the users.

- To provide aesthetic benefits for the adjacent communities.

While this would be an adjunct to a trail system rather than an essential element, there would be an excellent opportunity to combine the two functions, and in so doing, make the proposed trails more attractive to the communities that would help fund them. (The use of channel rights-of-way as community green strips or linear parks is discussed in the next chapter.)

It is recognized that the high costs of the projects described here, steep inflation rates, and severe demands

on agency funds combine to produce an atmosphere that encourages the elimination of what are seen as non-essential elements of a project. However, such an attitude toward these projects likely would produce results opposite of those intended. Use of the trails would be discouraged by unattractive trail facilities, resulting in less than optimal use of the money spent. Other communities or agencies considering the joint funding of similar projects might be discouraged to participate by projects that were not of high quality. This could cause consequent loss of funds that would have been available for such projects. In order to attract such participation, early projects of this type should be high quality, prototypical examples of what could be accomplished in providing green space and pleasant recreational paths through use of the channel rights-of-way in urbanized areas that might otherwise lack such amenities.

Sections of the Los Angeles River between Tujunga Wash and the Sepulveda Basin might be ideal for such a prototypical design. This section of channel has heavy concentrations of single- and multiple-family housing along its sides, and a busy commercial strip nearby.

Such aesthetic improvements need not be extremely expensive, particularly in relation to the large construction costs of the projects in heavily urbanized areas. During the channel survey, areas were noted where small groves of trees had been planted in open spaces within the right-of-way and were growing with no irrigation and very little maintenance. They provided shade and added a great deal to the visual characters of the neighborhoods.

The comments, plant lists, and details included in the landscaping sections of existing plans (LARIO/San Gabriel and Ballona) represent a satisfactory basic approach to the landscaping of trails within the channel system. The *Landscape Guide* (Ref. 4-3), prepared by EDAW, Inc. for the Santa Ana River/Santiago Creek Greenbelt Study, also outlines a good approach to landscaping along the channel system. In addition, the following points should be emphasized.

- It is particularly important in achieving an impression of quality that attention be given to the context of specific design situations, and that an assembly-line approach be avoided in the design of an entire trail. A small group of plants with a known tolerance to urban conditions and a minimal need for water might be used as "signature" plants to unify the entire trail system. These few plants ideally would have a riparian

association, e.g., the sycamore. Within this unifying scheme, however, plants should be selected that are compatible with the area of the design. There should be a heavier use of exotic plants in urban areas, and of native riparian, sage, or chaparral species in less developed areas. Emphasis should be placed on the use of plants with minimal maintenance and irrigation requirements.

- Accent plants with interesting forms, flowers, or foliage should be used occasionally. There has been an excellent use of attractive vines such as the passion vine along parts of the existing trail system, and on several occasions riders have been seen stopped to examine these plants.
- Plants that provide food and shelter for wildlife should be used whenever possible. Birds, squirrels, rabbits, and other small animals frequently were observed in and along the channels during the survey. Use of the channel system as a habitat for these creatures in urban areas should be encouraged. Landscape architects should receive assistance from Parks and Recreation Department biologists in preparing planting plans for channel trails. (Refs 4-4, 4-5, 4-6)

Signing along existing trails is considered to be inadequate. It is sometimes difficult to follow a trail or to find one's way back to the continuation of a trail after a detour onto city streets is required. Such confusion does much to discourage the use of trails for recreational purposes. (Commuters become familiar with routes quickly.) Clear and complete instructions should be considered a basic requirement of the trail system. Additional signs to indicate the locations of restaurants, bicycle and tack shops, points of interest, recreational areas, and even the names of interesting plants would make the trails much more attractive to users. The additional expense would be minor compared with construction costs and could be seen as a necessary item to ensure that the value of the overall investment is realized.

Themes might be developed for individual trails or segments of trails, and distinctive variations in signing, landscaping, rest area structures, wall murals, and trail names might be used as unifying elements related to the theme. Themes might reflect a relationship to nearby communities, geographic areas or features, or major points of interest. The identification of trails with neighboring communities could contribute to a sense of neighborhood identity in those communities and could encourage use of the trail while discouraging vandalism. Such a relationship might be encouraged by having local groups paint murals on channel walls along the trail.

DESCRIPTIONS OF POTENTIAL PROJECTS

Trail projects are described in the following pages for each location within the LACDA system where such development appears feasible and a reasonable need for the trail exists.

Route Descriptions

Though the scope of this study did not include detailed design of trails, the planning of a complete route for each project was considered necessary for two reasons:

- To establish with a reasonable degree of certainty that a channel was physically suitable for trail development
- To provide an estimate of project costs, without which a realistic appraisal of a project's feasibility would not be possible.

Routes were planned without the benefit of some information that eventually will be necessary for final design work, such as right-of-way ownership and utility locations. Also, it generally was not possible to consider alternative corridors (power line and railroad rights-of-way, city streets, etc.) that might be better suited to the location of a trail than the channel being studied. The routes described here should be viewed as preliminary recommendations. More thorough study of each of the trails is needed before final determination is made of the location of tunnels, crossings, and other route features.

The major judgments made at specific problem points involved questions of expense. An effort was made to be as realistic as possible with regard to weighing expense against utility. In cases of serious question, the optimal solution from the potential user's viewpoint was selected.

All trails would provide for travel in both directions. Route descriptions, however, were written assuming an upstream direction of travel. Distances given are for the entire length of the route, including those sections not within channel rights-of-way (city streets, parks, etc.).

Where obstructing streets would be crossed at grade, only signs would be used unless signals are indicated in the route description.

Appendix 1 contains maps of the channels showing the locations of streets mentioned in the route descriptions

Cost Estimates

The cost estimates provided here are approximate and are intended only to give sufficient information for rough comparisons among the projects, and between these projects and those already constructed (LARIO and San Gabriel). In order to facilitate a comparison with the earlier projects, the cost figures and format used here are based on those used for the May 1979 LARIO/San Gabriel Feature Design Memorandum. Unit costs used for the estimates are given in Table 4-1.

Only major cost items that could be estimated from information gathered during the channel survey (Appendix 1) are included here. Cost items not contained in the estimates included land acquisition, relocation of drain inlets and utilities, the cost of concrete block walls or other means of separation needed to reduce conflicts with channel neighbors, and inflationary increases since May 1979. All costs are rounded to the nearest \$500.

There is a great difference in cost between open-cut tunnel construction, which requires that traffic flow be halted across all or successive portions of a road while construction is in progress, and corrugated metal-plate arch construction, which does not interfere with the flow of traffic. The latter is assumed in these estimates only for tunnels under freeways. If it were determined that the flow of traffic on major streets such as Los Feliz and Coldwater Canyon could not be interrupted, it would be necessary to increase the costs for tunneling under these streets.

Jurisdictions and Proximity to Potential Trail Destinations

The proximity of each of the projects to potential trail destinations is given in the project descriptions. The following potential destinations are listed:

- Regional parks within two miles of the trail. These are considered to be major potential destinations of bicyclists and equestrians. Since the total trip length would include the distance to and along the trail, as well as that from the trail to the destination, it is likely that most trips in this category would be to parks within two miles of the trails.
- Neighborhood parks adjacent to the trail. Neighborhood parks are likely destinations of bicycle riders. Their large number and even distribution throughout the county, however, make it unlikely that a regional trail would be used to get to one. Parks immediately adjacent to trails are included because of the possible use of the trail as a lead-in strip to the park, or the possible use of the park as a rest stop for riders.
- Colleges and universities within two miles of the trail. These are also considered major potential destinations of bicyclists. The two-mile distance reflects the same reasoning as was used for regional parks.
- Secondary schools within one mile of the trail. Secondary schools, while likely destinations of bicyclists, are so well distributed that the total trip distance to them is not likely to exceed a mile. Elementary schools are not considered here. A much smaller percentage of elementary students ride bicycles to school. Also, elementary schools are so numerous and so evenly distributed throughout the region that they would not provide any useful distinction among projects.
- Shopping centers and business districts within two miles of the trail. These are also major potential destinations of cyclists. The two-mile distance reflects the same reasoning as was used for regional parks.

Each of the local jurisdictions through which projects would pass are listed along with the potential destinations. In cases where a channel has both potential bicycle and equestrian projects, jurisdictions and potential destinations are not repeated for the equestrian project, since the information would be the same.

List of Projects

On the following pages, projects are listed alphabetically by class. See page 4-3 and Figure 7 for an explanation of the classification system used. The following is a list of the potential projects described.

Class A Projects

Los Angeles River Bicycle and Equestrian Trails
San Jose Creek Bicycle and Equestrian Trails

Class B Projects

Arroyo Calabasas Bicycle and Equestrian Trails
Arroyo Seco Bicycle and Equestrian Trails
Bell/Chatsworth/Dayton Creek Bicycle and Equestrian Trails
Sawpit/Buena Vista Bicycle and Equestrian Trails
Thompson Creek Bicycle and Equestrian Trails
Tujunga Wash Bicycle and Equestrian Trails

Class C Projects

Aliso Creek Bicycle and Equestrian Trails
Bell Creek (West End) Bicycle and Equestrian Trails
Big Dalton Wash (Northern End) Bicycle Trail
Brown's Creek Bicycle and Equestrian Trails
Bull Creek Bicycle Trail
Burbank Western/La Tuna Canyon/Hansen Heights
Bicycle and Equestrian Trails
Compton Creek Bicycle Trail
Coyote Creek/North Fork Bicycle Trail
Eaton Wash Bicycle and Equestrian Trails
Laguna Dominguez Bicycle Trail
Limekiln Creek Equestrian Trail
Lopez Canyon Bicycle Trail
Pacoima Wash Bicycle Trail
Santa Anita Wash Bicycle Trail
Sawpit Wash
Walnut/Big Dalton/San Dimas Bicycle Trail
Walnut Creek (East of Big Dalton) Bicycle Trail and
Equestrian Underpass

Class D Projects

Arcadia Wash (South End) Bicycle Trail
Centinela Creek Bicycle Trail
Coyote Creek (North End) Bicycle Trail

Class E Projects

Emerald Wash, Live Oak Wash, and Marshall Creek
Bicycle Trails
Los Cerritos Bicycle Trail
Verdugo Wash (Upper End) Bicycle and Equestrian
Trails

TABLE 4-1. COST ANALYSIS FORMAT AND UNIT COSTS

FORMAT

Cost Item	Quantity	Cost ¹
Subtotal		\$
X 21% (engineering, design, admin., & contingency ²)		\$
Total		\$

¹ Includes labor, materials, installation, and 27.8% construction overhead and profit. All costs are rounded to the nearest \$500.

² Includes 10% for engineering and design, 6% for supervision and administration, and 5% for contingencies.

UNIT COSTS¹

All costs are for 12-foot widths, unless otherwise specified.

Clearing and grading		\$ 4.00/lf
4" asphalt paving		15.00/lf
12" concrete paving		56.00/lf
6" concrete paving		33.60/lf
3" concrete paving		20.00/lf
Resurfacing		3.20/lf
Removal of asphalt		7.80/lf
Ramp under crossing, trap. channel ² (10' wide)		89,000.00/ea
Tunnel under crossing (open cut) ³ : concrete box culvert		767.00/lf
ramp excavation and retaining walls		147,000.00/ea
Tunnel under crossing (corrugated metal-plate arch) ³ : culvert		3,200.00/lf
ramp excavation and retaining walls		147,000.00/ea
Ramp to channel floor, trap. channel (10' wide)		60,000.00/ea
Ramp to channel floor, vert. channel (10' wide)		66,500.00/ea
Benching into trap. channel side (10' wide)		270.00/lf
Bridges: 0-25' unsupported span		447.00/lf
25-100' unsupported span		575.00/lf
100-200' unsupported span		700.00/lf
200'+ unsupported span		1,000.00/lf
Pedestrian bridge (5' wide)		280.00/lf
Low flow crossing ⁴ (10' wide)		5,500.00/ea
Rest areas: without rest rooms and parking		44,700.00/ea
with rest rooms and parking		192,000.00/ea
Retaining wall (72" high)		192.00/lf
(48" high)		140.00/lf
Chain link fencing (30" high)		4.25/lf
(72" high)		10.25/lf
Landscaping at entry points, other special locations		13,000.00/ea location
Signals at crossings		19,000.00/ea location

¹ Based on May 1979 prices used for LARIO/San Gabriel estimates.

² Ramp costs vary considerably. The figure used is an approximate average.

³ Open-cut tunnel construction interrupts traffic on the road during the period of construction. CMP arch construction is used for tunneling under all freeways and under streets where interruption of traffic must be avoided.

⁴ Based on the cost of a 25'-100' bridge 5' wide.

CLASS A PROJECTS

- **Los Angeles River Bicycle and Equestrian Trails**
- **San Jose Creek Bicycle and Equestrian Trails**

LOS ANGELES RIVER BICYCLE AND EQUESTRIAN TRAILS

Both equestrian and bicycle trails are recommended for the Los Angeles River channel from its confluence with the Rio Hondo to the beginning of the river at the Bell Creek Calabasas Creek confluence. These trails would be difficult to construct in places, and they would be expensive. However, they would complete the most important portions of both the equestrian and bicycle regional backbone systems, providing access to the existing LARIO/San Gabriel segment of the backbone system for the large populations of the central and northwestern points of the region.

This improved access would increase the recreational potential of the existing trails significantly. The channel would provide routes from these trails to two major recreational areas, Griffith Park and the Sepulveda Basin. It would lead to potential channel connections with four other major, existing or proposed recreational areas: Hansen Dam, the Santa Monica Mountains, Devil's Gate Reservoir, and Chatsworth Reservoir.

The equestrian trail would offer major benefits to riders in the San Fernando Valley, who usually must trailer their horses to equestrian facilities and trail systems. The Los Angeles River, along with other potential channel trails to which it would connect, would make equestrian travel throughout the valley possible without the need for trailering.

The City of Los Angeles has adopted plans for development of an equestrian trail west from Griffith Park along Mulholland Drive to the Santa Monica Mountains. This trail would also act as a westward extension of the regional backbone. However, no funds have been allotted for the trail currently, and it is not known at this time when the trail will be built.

While the Los Angeles River trail would not be as attractive to riders, it would be much more accessible to residents of the San Fernando Valley and would provide connections to important equestrian areas. The two trails together would form an excellent trail loop. Either trail could form the base of the proposed Rim-of-the-Valley trail system.

The Los Angeles River trail projects are divided here into six segments, which could be completed in phases as separate projects. Each of the segments would serve localized uses until the entire system was completed,

but the major benefits at a regional level would not be realized until trails along the entire length of the channel were operational. The six segments, in consecutive order from the Rio Hondo confluence, are described below.

Segment 1. Los Angeles River: Rio Hondo Confluence to Downey Road

A bicycle trail terminating at the end of this segment would provide increased access to the LARIO/San Gabriel trail system and would provide the adjoining communities west of the river (South Gate, Cudahy, Bell, Maywood, and Vernon) with a Class I bicycle route for transportation purposes. Commuters could use this trail to travel to the industrial district along the river in Vernon.

There is no equestrian activity in areas along this segment, and a bridge path ending at Downey Road would be of no use. The equestrian trail for this segment therefore should not be built until it can be completed all the way to Griffith Park.

The bicycle trail would be located along the west side of the channel to provide maximum access to the adjacent communities. (The Long Beach Freeway parallels the channel on the east, restricting access.) Location of the equestrian trail on the east side would allow use of the power line right-of-way between the channel and freeway.

Development of trails north of Slauson Avenue in this segment would be difficult and very expensive. There is insufficient space along the west side for a trail, and railroad tracks immediately adjacent to the east access road make this road unsuitable for use by horses. For part of this distance, trails would be located on a bench cut into the side of the channel. Also, it would be necessary for the equestrian trail to cross an active railroad line in two places. This expense and inconvenience must be weighed against the great importance of this segment as a critical link in the backbone system, without which the eastern and western halves of the system would be isolated from each other.

Plans currently are being prepared by the County Road Department and the County Parks and Recreation Department for a bicycle trail along this segment.

Segment 2. Los Angeles River: Downey Road to Figueroa Street

This segment of the Los Angeles River constitutes one of the major obstacles to developing the system of regional trails described in this report. As in the case of the previous segment, this segment is also a key link in the backbone system since it connects the eastern and western halves of the system. Industrial facilities and rail yards obstruct access along both sides of the channel for most of the length of the segment, thus making trails along the sides impossible. The channel has a rectangular section from 37th Street to the Butte Street railroad bridge (about 0.6 mile). This section is covered with water (though only a few inches deep) for more of the year than the remainder of the channel.

There are four possibilities for connecting proposed trails below Downey with those above Figueroa:

- Locate trails on the bottom of the channel
- Use surface streets to bypass this segment of channel
- Bench into the trapezoidal walls, using the channel bottom or surface streets for the length of the vertical sections
- Take advantage of the rail lines and switching yards along the sides to arrange a rail connection between the two ends of the segment.

The use of surface streets in this area is possible for bicyclists (though not desirable) but not possible for equestrians. Traffic in the area is quite heavy at times and includes many heavy trucks that would frighten horses. The fact that railroad tracks cross the streets in many places would make bicycle travel unpleasant. No suitable paths for horses (rail rights-of-way, alleys, vacant lots, etc.) could be located in the area.

To avoid the high cost of benching into the channel sides and the undesirable option of the use of surface streets by cyclists, it is recommended that both trails be placed on the channel floor for most of this segment. If this were done:

- A thicker strip of pavement, perhaps 12 inches thick, would be necessary for the trails through the rectangular section from 37th Street to the Butte Street railroad bridge.

- It would be very important, given the distance that horses would travel on the channel floor, that a satisfactory means of providing a dirt trail surface be developed

- It would be necessary for both trails to cross the low-flow channel twice. The low-flow channel diverges just south of 37th Street into two branches that flow along the main channel walls through the vertical section. The branches merge into a single channel north of Washington Boulevard.

Trails on the channel floor would not be usable during those times of the year when water in the channel rose above the trail surface. Further study is needed, particularly for the vertical section, to determine how often this would occur. During these periods, the equestrian trail would be closed, and bicyclists would use surface streets to detour around the impassable section.

As an alternative to use of the channel floor for the entire length of the segment, the bicycle trail could be benched into the side from north of Washington Street to Broadway. (The channel section is also rectangular from north of Broadway to Figueroa.) Consequently, two short, street detours would be required during times of flooding instead of one much longer one.

A second alternative might be to make use of the rail lines along the east side of the channel to ferry equestrians, and possibly bicyclists, past the obstructed segment of channel. There is a large switching yard east of this segment of channel where trains are coupled, and there is frequent shuffling and reassembling of cars on spur tracks in this area. It might be possible to have a car available for loading for a half hour on Saturday and Sunday mornings at the south end of the track that dead-ends north of Slauson Street; it then would be towed to the north end of the yards near the Glendale Freeway. Subsequently, the car would load riders from the Griffith Park area and take them south to Slauson Street. The process would be repeated in the late afternoon and perhaps on weekdays by special request of large groups of riders.

Completion of trails through this segment should not occur until after Segments 1 and 3 are developed. Completion of the Segment 2 trails then would link the LARIO/San Gabriel trail system to Griffith Park, a major focus of equestrian activity in Los Angeles and a major destination for bicyclists.

Completion of this segment would also improve the feasibility of commuting by bicycle to the downtown area. Commuters using the channel trail would have a one-to-two-mile ride from the river to the government buildings and office complexes between San Pedro and Figueroa Streets.

Segment 3. Los Angeles River: Figueroa Street to Barham Boulevard

It would appear initially that this portion of the Los Angeles River would have great potential for recreational use because of its proximity to Griffith Park and the large concentration of equestrian facilities north and east of the park. However, the Golden State and Ventura Freeways isolate the river from the park and prevent its integration into park activities.

Because of this separation, the recreational potential of the river is reduced rather than enhanced by the park because of the competition for the use of bicyclists and equestrians. Riders could detour from the channel trails through the park on existing bicycle and equestrian trails; they would then rejoin the channel trails at the opposite end of the park with very little loss of time. Given this choice, most riders probably would use the more scenic park routes.

The potential for use of the channel for bicycle trails is further reduced by the fact that access to that portion of the channel adjacent to the park is obstructed by the Ventura Freeway at the park's northwest corner and by Los Feliz Boulevard at its southeast corner. The channel has a rectangular section under both of these obstructions, and relatively long tunnels would be required to cross under them. There is an existing equestrian tunnel under the Ventura Freeway near its crossing at the northwest corner, in addition to other equestrian tunnels under the freeways along different areas of the park. These tunnels are only nine or ten feet wide, are long, and are heavily used. Shared use with bicyclists probably would not be safe.

Trails along both sides of the river in certain parts of the channel are now used extensively by equestrians to gain access to bridges and tunnels leading to the park. The channel thus serves a useful function since access to the park is quite restricted from the north and east. Providing similar access improvements through the channel right-of-way for bicyclists from north and east of the park would be very beneficial; however, it would require the construction of a bridge (the horses now wade across the river) and a new tunnel under the

freeway. There is an existing pedestrian bridge south of Los Feliz. However, it is of limited use for access to the main part of the park north of Los Feliz, since the boulevard must be crossed after leaving the bridge. It is not currently suitable for bicycle traffic.

Construction of a bridge north of Los Feliz would serve equestrians as well as bicyclists. There have been numerous complaints concerning the safety of the ramps and river crossing there and frequent inquiries about the possibility of a bridge. However, such a bridge (about 275 feet long) would be very expensive. (It would cost about \$275,000 for a 12-foot wide equestrian or bicycle bridge, or \$458,500 for a 20-foot wide bridge for both.)

Given these facts, there are three possible approaches to the continuation of trails from Los Feliz to the Ventura Freeway crossing near Forest Lawn Drive:

- The least expensive alternative would be to make use of Griffith Park's existing bicycle and equestrian trails. A new bridge or improvements to the existing bridge south of Los Feliz, both of which would be about equally expensive, would be required for bicyclists to cross the freeway. The cyclists would then cross Los Feliz at the existing crosswalk to the north. Equestrians would require a tunnel under Los Feliz. They would cross the river at the existing crossing — improvements are needed, however, as discussed below — and then pass under the freeway through the existing tunnel into the park. Both could reenter the channel right-of-way west of the Ventura crossing with no additional major construction.
- A bridge across the river for both bicyclists and equestrians near the existing equestrian tunnel north of Los Feliz would improve access to the park greatly for both groups of users. If this option were selected, both bicyclists and equestrians would pass under Los Feliz in tunnels. A bridge would be built across the freeway into Griffith Park for bicyclists. Equestrians would continue to cross into the park through the existing tunnel, since horses probably would balk at crossing a bridge over the freeway. The bridge across the river would eliminate the existing equestrian river crossing and the associated safety problems, as well as the need for bicyclists to travel down or cross over Los Feliz to enter Griffith Park. Since the channel bicycle trail from the Golden State Freeway to Los Feliz would act as a lead-in strip to the park from the residential area west of the channel, this option would provide many children from south and east of the park with safe access to the park that is completely separated from traffic.

- Through trails for both bicyclists and equestrians could be provided in the channel right-of-way along the entire eastern and northern sides of the park. A bridge would be provided over the freeway north of Los Feliz for bicycle access to the park, and another bridge would be built over the Ventura Freeway near Forest Lawn Drive. Two tunnels under Los Feliz would also be provided. As discussed previously, it is doubtful that these trails would receive much use, since most riders probably would detour through the park.

The route description and cost analysis for this segment are based on the second option, since this would be optional from the point of view of trail users.

During the course of this study, frequent complaints and reports were heard concerning injuries at the equestrian crossing north of Los Feliz. If an equestrian bridge is not built here, improvements should be made at this crossing and at the crossing north of the park at Riverside Drive. The major problems are:

- Dirt ramps to the channel floor at the crossings. Horses are uncomfortable on these long ramps and can slip or frighten easily, with the possibility of the rider falling off onto the channel side. The ramps at Riverside Drive are seldom used because they are considered too dangerous. Those north of Los Feliz are heavily used because they are the only means of crossing into the park on this side. An equestrian bridge would be the optimal solution. Alternatively, wider ramps cut into the channel sides would improve footing for horses. Breakaway fences might also be used along the inside edge of the top part of the ramp to break the fall of a thrown rider and to make the horses less nervous on the ramp. Such fencing would wash away in the event of a major flood and would not impede the flow of the flood waters.
- Traffic noise along the section of trail paralleling the freeway. Horses are easily frightened, particularly by truck horns. A wall is scheduled for construction by Caltrans next spring.
- The river crossing. The horses cross over a concrete slab, but they slip easily when algae forms on the concrete. An improved crossing surface is needed.
- The tunnel under the freeway. Equestrians complain that the tunnel is too small for safe use.
- Use of the tunnel and equestrian trails by motorcyclists. Motorcycles frequently use the channel's equestrian facilities, and horses are often frightened

by them. This is particularly dangerous in the tunnel. Barriers that could be stepped over by horses are needed at the tunnel entrances, and enforcement should be improved.

Segment 4. Los Angeles River: Barham Boulevard to Tujunga Wash

Completion of this segment would extend the backbone trail system further to its potential connection along the Tujunga Wash to the Hansen Dam Recreational Area. It would provide improved access to Griffith Park and the LARIO/San Gabriel trails for San Fernando Valley residents, particularly those who are equestrians. The bicycle trail would also serve local transportation needs.

The channel has a rectangular section through this distance. Currently, access is restricted along the vertical channel sides by the Lakeside Country Club and Universal Studios. The Hollywood Freeway is a major obstruction. For these reasons, both trails would be ramped to the channel floor east of Barham and would continue on the channel floor until west of the Hollywood Freeway.

Universal Studios has applied for a permit to cover the channel from their eastern property line to Cahuenga Boulevard, a distance of about 700 feet. Conditions of such a permit probably would require that easements be left on the covered section for two trails. In this case, the floor of the channel would be used only south of the Burbank Studios and from east of Cahuenga to west of the Hollywood Freeway.

Members of the Lakeside Country Club should also be questioned about the possibility of allowing an easement for an equestrian trail along the channel. This land is now part of the golf course but serves only as a buffer strip between the channel and the nearest fairway. It is separated from the fairways by a row of trees, and its function as a trail would not interfere with use of the golf course.

This segment of the channel is well suited to travel on the channel floor. There is a large, low-flow channel that contains the flow for all but a few days of the year. The channel floor is in excellent condition; there is little debris; and the channel is wide enough to prevent an uncomfortably constricted feeling.

Segment 5. Los Angeles River: Tujunga Wash to White Oak Avenue

Trails along this segment would extend the regional backbone to the Sepulveda Basin, thereby completing a major connection between Griffith Park and the basin. The trails would provide greatly improved recreational access to the basin, especially for equestrians. The absence of any equestrian trails now leading to this area has resulted in the possibility that proposed bridle paths may be omitted from the basin plan.

The bicycle trail would also serve local transportation needs. The trail, which parallels a busy commercial strip along Ventura Boulevard for part of its length, would provide separation from the heavy auto traffic of the area. This would be desirable for the residents who bicycle to these shops from the many single- and multiple-family homes along the channel. Aside from its regional significance, a bicycle trail along this segment of the Los Angeles River would be a very attractive local project.

Except within the Sepulveda Basin, this segment of the channel has a rectangular section. It is crossed frequently by busy streets. The 405 Freeway and an access ramp are major obstructions just east of the Sepulveda Basin. Several of the crossing streets have large inlets entering the channel beneath them on both sides, which would make construction of a tunnel difficult or impossible. Development of this segment of the channel therefore would be quite expensive.

Because of the problems with tunneling, the floor of the channel would be used to underpass many of the obstructions. The channel floor is not as desirable for use in this segment as in Segment 1, since the channel is narrower and has no low-flow structure. The trails therefore would be ramped up to the side after each undercrossing, rather than remaining on the floor for an extended distance.

Segment 6. Los Angeles River: White Oak Avenue to Bell Creek Confluence

Trails along this segment would extend the regional backbone system to its western terminus at the confluence of Bell Creek and Arroyo Calabasas. Bell Creek is part of a proposed channel connection to the recreational area to be developed at Chatsworth Reservoir, while Arroyo Calabasas is an important potential channel connection to the Santa Monica Mountain Recreational Area.

The bicycle path would serve transportation as well as recreational purposes, providing a Class I trail for adjacent San Fernando Valley communities. Safe bicycle travel to Reseda and Canoga Park High Schools, both adjacent to the channel, would be facilitated by the trail.

The equestrian trail would link concentrations of horses in the western San Fernando Valley to the backbone system and to the Sepulveda Basin Recreational Area, thus reducing the need to trailer horses long distances.

Proposed connections at the Brown and Aliso Creek Channels would provide equestrian routes from the backbone to the San Gabriel Mountains. They also would create trail loops that would add considerable interest to the local trail systems.

Development of trails along this segment would be relatively expensive, since ramped undercrossings would be needed at frequent intervals. However, the channel is trapezoidal in section in this segment, which would make undercrossings less expensive.

TABLE 4-2a. LOS ANGELES RIVER BICYCLE TRAIL (38.9 MILES)

SEGMENT 1. RIO HONDO CONFLUENCE TO DOWNEY ROAD (8.5 MILES)

Route (Plans for this segment are now being prepared by the Los Angeles County Road Dept. The route described here is that selected by the Road Department). Cross from the LARIO trail to the west side of the channel over the existing bike lane on Imperial Highway bridge. Travel north on the west side of the river, ramping under each of the eleven obstructions (Long Beach Freeway, Salt Lake Ave. RR bridge, Firestone, Patata St. RR bridge, Clara, Florence, Gage, Randolph St. RR bridge, Slauson, Atlantic and District St. RR bridge). From about ¼ mile south of Slauson to ¼ mile north of Slauson it would be necessary to lower the access road on top of the levee to widen it sufficiently for the trail, using the existing retaining wall to contain flood flows. From Atlantic to Downey there is no access road along the west side, and it would be necessary to bench into the trapezoidal side to provide a flat trail surface.

There is no suitable place along the west side of the channel for a rest area. A rest area would be located on the east side south of Slauson. Bicyclists could cross to and from this area over the Gage Street bridge. This is the last good location for a rest stop until the park at Spring Street.

<i>Costs</i>		
Resurfacing	20,000'	\$ 64,000
Ramps in trap. channel	11	979,000
Lowering access area along side 2'-7"	2,800'	288,500
Benching into side	7,000'	1,890,000
Fencing	4,000'	41,000
Rest area	1	192,000
Landscaping	3 locations	39,000
Subtotal		\$3,489,500
x 21%		733,000
Total		\$4,222,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	2	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	0	
Jurisdictions: South Gate, Cudahy, Bell, Vernon, Los Angeles County		

SEGMENT 2. DOWNEY ROAD TO FIGUEROA STREET (6 MILES)

Route: Descend to the channel floor using the existing truck ramp north of Downey. The trail along the channel floor would be on 3" concrete except from 37th St to the Butte St. RR where 12" concrete would be used. Continue on the channel floor until north of Figueroa, crossing the low-flow channel twice, then ramp up to the west side. Access ramps to the trail would be provided at Soto (vertical channel), Olympic, Whittier (existing), 1st, and Macy (all on the west side). A ramp on the east side would provide access to the park at Spring St., which would be used as a rest stop. It would be necessary to cross the low-flow channel again at this point to exit to the park. (Note: Trails along this segment of the channel would not be usable during those times of the year when the water level rises above the trail surface.)

<i>Costs</i>		
Concrete paving 12"	3,000'	\$ 168,000
Concrete paving 3"	28,500'	570,000
Access ramp to channel floor (vert. chan.)	1	66,500
Access ramps to channel floor (trap. chan.)	4	240,000
Low flow crossings	3	16,500
Rest area improvements	1 location	10,000
Subtotal		\$1,071,000
x 21%		225,000
Total		\$1,296,000

Alternative: Bench into the trapezoidal sides instead of placing the trail on the channel floor. The trail would ramp to the floor to cross the vertical sections of the channel. Cost: \$5,850,000.

Regional parks within 2 miles	1	
Neighborhood parks adjacent	3	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	2	
Jurisdictions: Vernon, Los Angeles City, Los Angeles County		

SEGMENT 3. FIGUEROA STREET TO BARHAM BOULEVARD (10.5 MILES)

Route: Continue north from Figueroa on the west side. Ramp under Fletcher and Glendale Blvd. (long ramps needed in both places). Tunnel under Los Feliz Bridge over the freeway to the west into Griffith Park. A combined bicycle and equestrian bridge would provide access from east of the channel to the freeway bridge. Continue through the park on existing bike paths, then west on Forest Lawn Drive toward Barham.

(Table 4-2a Continued)

Costs		
Asphalt paving	500'	\$ 7,500
Resurfacing	17,000'	54,500
Ramps in trap chan. (long)	2	170,000
Tunnel under Los Feliz (open-cut)	1	223,500
Bridge over freeway (145' clear span; two 250' approaches)	1	325,000
Bridge over channel	275' x 12'	275,000
Fence repairs	3,000'	31,000
Landscaping	4 locations	52,000
Subtotal		\$1,138,500
x 21%		239,000
Total		\$1,377,500

Alternatives.

1. Bridge over the freeway south of Los Feliz. Cross Los Feliz at existing crosswalk to the north, continue on park trails. Eliminate bridge north of Los Feliz. Cost: \$774,500.
2. Provide a trail in the channel ROW along the entire eastern and northern sides of the park. A tunnel under Los Feliz and bridges over the Golden State Freeway (access to park) and the Ventura Freeway would be needed. There would be no bridge across the channel. Cost: \$2,149,000.

Regional parks within 2 miles	2
Neighborhood parks adjacent	4
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	4
Shopping centers and business districts within 2 miles	4
Jurisdictions: Los Angeles City, Glendale, Burbank	

SEGMENT 4 BARHAM BOULEVARD TO TUJUNGA WASH (3 MILES)

Route: Ramp to the channel floor east of Barham and continue to the west (1.6 miles on the floor, using 3" concrete paving). An access ramp would be provided at Lankershim. Ramp up to the south bank after crossing under the Hollywood Freeway. A rest stop would be provided near this point. Continue west to the Tujunga Wash, ramping to the floor and up again to cross under Vineland. Cross Tujunga Ave. at grade.

Costs		
Concrete paving 3"	8,750	\$ 175,000
Asphalt	5,000	75,000
Ramps to channel floor (vert. channel)	5	332,500
Rest area	1	192,000
Fencing		55,000
Landscaping	2 locations	26,000
Subtotal		855,500
x 21%		179,500
Total		\$1,035,000

Regional parks within 2 miles	0
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	1
Shopping centers and business districts within 2 miles	0
Jurisdictions: Los Angeles City, Burbank, Universal City	

SEGMENT 5: TUJUNGA WASH TO WHITE OAK AVENUE (8 MILES)

Route: Continue to the west on the south side of the channel crossing Radford at grade. Ramp down to the channel floor about 300' south of Laurel Canyon to avoid the inlet there. Cross under Laurel Canyon, ramp back up to the south side of the channel. Cross Whitsett at grade. A ramp would be provided south of Coldwater Canyon to the shopping center south of the ROW (Gaslight Alley). Cross under Coldwater Canyon on the channel floor, ramping back up to the south side west of Coldwater Canyon. Descend to the channel floor east of Fulton and ramp back up west of Moorpark.

Ramp to the channel floor to cross under Woodman, the Hazeltine/Ventura Freeway crossing, and Van Nuys, returning to the top after each undercrossing. Cross Kester at grade (signs only). Ramp to the floor east of Sepulveda and remain on the floor until west of the freeway and access ramp. Ramp to the top, then follow the south side of the channel to the existing road to the top of the dam. Follow the dam road to the western end of the dam, then ramp down into the park and travel north a short distance to join the existing bicycle trail along Burbank Boulevard. Travel west along Burbank and north along Balboa on the existing trail, reentering the channel ROW by crossing under Balboa to the west on the existing bicycle ramp at the north side of the channel. Continue west along the side of the river to White Oak, ramping under the SPT RR bridge.

All trails on the channel floor in this segment would be on 6" concrete surfacing rather than 3", since there is no low-flow channel.

(Table 4-2a Continued)

Costs:		
6" concrete paving	3,500'	\$ 117,500
Asphalt	32,000'	480,000
Ramps to channel floor (vertical channel)	14	931,000
Ramps in trap channel	1	89,000
Ramps from dam road to park	1	90,000
Fencing		116,500
Landscaping	6 locations	78,000
Subtotal		\$1,902,000
x 21%		399,500
Total		\$2,301,500

Regional parks within 2 miles	2
Neighborhood parks adjacent	1
Colleges and universities within 2 miles	1
Secondary schools within 1 mile	2
Shopping centers and business districts within 2 miles	4
Jurisdictions: Los Angeles City	

SEGMENT 6: WHITE OAK AVENUE TO BELL CREEK (4.9 MILES)

Route: Continue west on the north side of the river. Ramp under White Oak Avenue, Victory Boulevard/Lindley Avenue (one long ramp), and Reseda Boulevard. Cross over Aliso Creek (bridge needed) and ramp under Wilbur Avenue, Tampa Avenue, Corbin Avenue, Winnetka Avenue, Vanowen Street, and Mason Street. Cross over Brown's Creek inlet (bridge needed), and ramp under DeSoto Avenue and the Canoga Avenue auto and RR bridges (one ramp for both). Cross at grade at Owensmouth.

Costs:		
Resurfacing	22,300	\$ 71,500
Ramps in trap channel	11	979,000
Benching in trap side (Lindley to Victory)	350'	94,500
Bridges	2	57,500
Landscaping	6	78,000
Subtotal		\$1,280,500
x 21%		269,000
Total		\$1,549,500

Regional parks within 2 miles	1
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	2
Shopping centers and business districts within 2 miles	3
Jurisdictions: Los Angeles City	

PROJECT TOTALS

Total Cost: \$11,782,000 (see note at end of Table 4-2b)

Regional parks within 2 miles	7
Neighborhood parks adjacent	14
Colleges and universities within 2 miles	1
Secondary schools within 1 mile	17
Shopping centers and business districts within 2 miles	13
Jurisdictions: South Gate, Cudahy, Bell, Vernon, Los Angeles City, Glendale, Burbank, Universal City, Los Angeles County	

TABLE 4-2b. LOS ANGELES RIVER EQUESTRIAN TRAIL (38.9 MILES)

SEGMENT 1: RIO HONDO CONFLUENCE TO DOWNEY ROAD (6.5 MILES)

Route: Cross the Rio Hondo from the existing LARIO trail (new bridge required) to the east side of the Los Angeles River. Follow the power line ROW between the channel and Long Beach Freeway north to Slauson Avenue, ramping under each of the obstructing streets and railroad bridges. A rest area would be located south of Slauson Avenue. Ramp under Slauson, crossing the rail that parallels the channel from Slauson to the north, reentering the power line ROW (this rail dead-ends at Slauson and is probably unused or infrequently used). Continue north in the power ROW. Active rails must be crossed twice before reentering the channel ROW. Ramp down from the side 1/4 mile south of Atlantic to avoid crossing a third set of tracks. Bench the trail into the side from this point until north of the District Street RR bridge. This would be done to provide separation between the equestrian trail and the rails paralleling the channel ROW at this point. Ramp up to the access road north of District Street, continue north on the access road until separation from the rail line again diminishes (about 1/4 mile south of Downey). Ramp from this point to the channel floor, continuing on the floor until north of Downey.

(Table 4-2b Continued)

<i>Costs:</i>		
Bridge at Rio Hondo		\$ 427,500
Ramps in trap. channel	8	
Benching into side	4,800'	1,296,000
Ramps to channel floor (trap. chan.)	1	60,000
Removal of asphalt	2,800'	22,000
Rest area	1	192,000
Subtotal		\$1,997,500
x 21%		419,500
Total		\$2,417,000

SEGMENT 2: DOWNEY ROAD TO FIGUEROA STREET (6 MILES)

Route: Continue north on the channel floor, crossing the low-flow channel twice. Rest rooms and a watering trough for the horses would be provided on the east side of the channel north of the Butte RR bridge (there is minimal room available for the rest facility), along with a ramp leading to them. A ramp would be provided at Spring Street for access to the park there, which would serve as a rest stop. Ramp up to the east side north of Figueroa. (Note: Trails along this segment of the channel would not be usable during those times of the year when the water level rises above the trail surface.)

<i>Costs:</i>		
Concrete paving 12"	3,000'	\$ 168,000
Concrete paving 3"	29,800'	596,000
Access ramps to channel floor (trap. chan.)	3	180,000
Low-flow crossings	2	11,000
Rest area and improvements at Spring Street Park	2 locations	100,000
Subtotal		\$1,055,000
x 21%		221,500
Total		\$1,276,500

SEGMENT 3: FIGUEROA STREET TO BARHAM BOULEVARD (10.0 MILES)

Route: Continue north from Figueroa on the east side. Ramp under Fletcher and Glendale Boulevard (long ramps needed in both places). Tunnel under Los Feliz. Cross the channel over a new equestrian bridge. Cross under the freeway into the park using the existing tunnel. Follow the existing bridle path through the park, crossing to the north side of the channel at the existing Mariposa Street tunnel and bridge. Follow the existing equestrian trail to the west toward Burbank studios.

<i>Costs:</i>		
Removal of asphalt	21,800'	\$ 170,000
Ramps in trap. chan.	2	170,000
Bridge	275' x 12'	275,000
Fencing		12,000
Subtotal		\$ 627,000
x 21%		131,500
Total		\$ 758,500

Alternatives

1. Cross the river using the existing equestrian crossing instead of a new bridge. New ramps would be cut into the sides to replace the existing dirt ramps, fencing would be added along the ramps, and improvements would be made in the crossing. Cost: \$587,000.
2. Provide a trail in the channel ROW along the entire eastern and northern sides of the park. A tunnel under Los Feliz would be required, and the existing river crossing north of Los Feliz would be used with improvements as described in Alternative 1, instead of a bridge. A bridge would be needed to cross the Verdugo Wash, and ramping would be needed to cross the two cut out inlet sections north of the park. Cost: \$781,500.

SEGMENT 4: BARHAM BOULEVARD TO TUJUNGA WASH (3.5 MILES)

Route: Ramp to the channel floor east of the Burbank Studios, and continue west on the floor until past the Hollywood Freeway (2.1 miles on the floor, using 3" concrete paving). Ramp up to the north side of the channel. A rest area would be provided at this point. Ramp to the floor and up again to cross under Vineland. Cross Tujunga at grade. Continue west to the Tujunga wash. A bridge would be provided to cross the wash.

<i>Costs:</i>		
Bridge at Tujunga Wash		\$ 57,500
Ramps to channel floor (vert. chan.)	4	266,000
Concrete paving 3"	11,300'	226,000
Rest area	1	192,000
Fencing		73,000
Subtotal		\$ 814,500
x 21%		97,500
Total		\$ 912,000

(Table 4-2b Continued)

SEGMENT 5: TUJUNGA WASH TO WHITE OAK AVENUE (8 MILES)

Route: Continue to the west on the north side of the channel, crossing Radford at grade. Ramp down to the channel floor and up again to cross under each of the obstructions from Radford to Kester (Laurel Canyon, Whisett, Coldwater Canyon, Fulton/Moorpark, Woodman, Hazeltine/Ventura Freeway, and Van Nuys; the trail would stay on the invert from east of Fulton to west of Moorpark). Cross Kester at grade. Ramp to the floor east of Sepulveda and remain on the floor until west of the freeway and access ramp. Ramp up to the north side of the channel. (Note: It might be possible to continue on the channel floor past the spillway directly into the park.) Climb the east face of the dam to the top of the dam (dirt slope, not very steep). Ramp down the west face of the dam and travel northwest to join the proposed park bridle path along Burbank Boulevard. Follow Burbank west to the channel, then travel east along the south side of the channel to White Oak, crossing under Balboa on the existing equestrian ramp and ramping under the SPT railroad bridge.

<i>Costs:</i>		
6" concrete paving	2,700'	\$ 90,500
Ramps to channel floor (vert. chan.)	18	1,064,000
Ramps in trap channel	1	89,000
Ramp from top of dam into park		110,000
Fencing		112,000
Landscaping	8 locations	78,000
Subtotal		\$1,544,000
x 21%		324,500
Total		\$1,868,500

SEGMENT 6: WHITE OAK AVENUE TO BELL CREEK (4.9 MILES)

Route: Continue west on the south side of the river. Ramp under White Oak Avenue and Lindley Avenue. Cross Caballero Creek (bridge needed) and ramp under Victory Boulevard, Reada Boulevard, Wilbur Avenue, Tampa Avenue, Corbin Avenue, Winnetka Avenue, Vanowen/Mason Street (one long ramp), DeSoto Avenue, and the Canoga Avenue auto and railroad bridges (one ramp for both). Cross Owensmouth at grade (signal required).

<i>Costs:</i>		
Removal of asphalt	22,500	\$ 175,500
Ramps in trap chan.	11	979,000
Benching in chan. side	300'	81,000
Bridge	50'	29,000
Traffic signals	1 location	19,000
Landscaping	3 locations	39,000
Subtotal		\$1,322,500
x 21%		278,000
Total		\$1,600,500

TOTAL PROJECT COST¹ \$6,833,000

¹Total project costs for the bicycle and equestrian trails indicate the cost of either trail built without the other. The two projects would share a common rest area and ramp in Segment 2, and a common bridge in Segment 3. Total cost of bicycle and equestrian trails built together would be \$382,500 less than the sum of the two projects.

SAN JOSE CREEK BICYCLE AND EQUESTRIAN TRAILS

San Jose Creek offers the best potential within the channel network for an eastward extension of the regional backbone trail system. Such an extension would link the eastern San Gabriel Valley to major recreational areas to the west, including the Whittier Narrows Recreational Area and the southern coastline. It would provide residents of the area with access to the San Gabriel Mountains along the San Gabriel River Trail and would connect to the Thompson Creek Channel, a potential eastern route to the mountain area. It would also connect with the Skyline Trail, a major equestrian and biking route now under construction. The recreational potential of these areas and of the existing backbone trails would be increased by the improved accessibility that these trails would offer.

In addition to its recreational potential, the bicycle trail would provide a transportation route to commercial, business, and industrial areas along the channel, and to numerous schools and parks.

The equestrian trail would overlap in function with the Skyline Trail, which is now being constructed. Both would provide regional access to the eastern San Gabriel Valley. San Jose Creek, however, would serve some equestrians bypassed by the Skyline Trail, would provide an alternative route to the Skyline, and would complete two trail loops of 20 and 30 miles. Coordination with other agencies is needed to weigh the additional benefits that the San Jose trail would provide.

Rapid development is occurring in much of the area along this channel. The existence of a regional bicycle trail might encourage developing communities to include good bicycle networks in their planning. As urbanization occurs, existing equestrian trails will be obstructed in many places, and the development of regional equestrian trails in the area will become much more difficult. Efforts should be made to take advantage of possible routes such as the channel offers before inevitable encroachments into the right-of-way occur.

The San Jose Creek trails are divided here into three segments, which could be completed in phases as separate projects. Each of the phases would serve localized uses until the entire system was completed, but the major benefits at the regional level would not be realized until trails along the entire length of the channel were operational. The three segments, beginning at the San Gabriel River, are described below.

Segment 1. San Jose Creek: San Gabriel River to Lemon Avenue

Recreational trails on this segment would extend the regional backbone to the east for a distance of nine miles, thereby improving access to the existing LARIO San Gabriel trail system from this area. Access to the proposed Otterbein Regional Park and the Industry Hills Civic Recreation Conservation Area would also be improved. The bicycle trail would also provide a transportation route from residential areas along the channel to the concentration of business and industry in the City of Industry.

The equestrian trail would connect with the San Gabriel Trail at its west end and the proposed Skyline Trail at its east end, creating a major trail loop. It would provide access to both these facilities from a concentration of equestrian activity near 7th Street.

Consideration should be given to merging the Skyline Trail with the San Jose Creek equestrian trail proposed here from a quarter-mile south of Nogales Street to Fairway Drive. The channel right-of-way would provide better separation from auto traffic and trains than the proposed route, which lies adjacent to Valley Boulevard and the SPT railroad.

Development of trails along this segment would not be difficult, since it contains relatively few obstructions compared to most other channels.

The Los Angeles County Road Department has studied this segment of the San Jose Creek for potential development of a bicycle trail (Ref 4-7).

Segment 2. San Jose Creek: Lemon Avenue to Los Angeles County Fairgrounds

Recreational trails along this segment would extend the regional backbone to the east an additional six miles, thus providing regional access to Cal Poly, Pomona, and the Los Angeles County Fairgrounds. Both of these locations are centers of equestrian activity, as well as major traffic destinations.

Good transportation access for bicyclists along this route would be a major benefit for the rapidly developing communities in the area and might stimulate the development of a good network of regional bicycle trails. Aside from its regional importance, a bicycle trail along this segment might be an excellent local project, serving these communities, Cal Poly and the fairgrounds.

An equestrian trail along this segment would link the Skyline Trail at its south end with a proposed connection along Thompson Creek at the north end to the San Gabriel Mountains. These three trails and others would form a major equestrian loop including both urban and foothill trails.

Trails along this segment would be more costly than those along Segment 1 because of more frequent obstructions. The San Bernardino Freeway, in particular, would be a major obstruction to both trails.

TABLE 4-3a. SAN JOSE CREEK BICYCLE TRAIL (16.5 MILES)

SEGMENT 1 SAN GABRIEL RIVER TO LEMON AVENUE (10.6 MILES)

Route: From the San Gabriel River crossing, follow the south side of the channel, ramp under the San Gabriel River Freeway and continue under Workman Mill Road (no ramp necessary). Tunnel under 7th St. (difficult tunnel due to drain inlets) and cross the U.P.R.R. at grade. Tunnel under Turnbull Cyn. Road and cross to the north side of the channel on the existing bridge at Patriot Place. Continue on the north side under Hacienda Blvd. (no ramp necessary), and cross Stimson Ave., Union Pacific RR, Southern Pacific RR, and Anaheim-Puente Road at grade. Continue under Azusa Ave. (no ramp necessary). Tunnel under Nogales St., cross Sentous Ave., Fairway Drive, and Lemon Ave. at grade.

<i>Costs:</i>		
Resurfacing existing asphalt	41,400'	\$132,500
Asphalt paving	12,300'	184,500
Ramps	1	89,000
Tunnels (open-cut)	3	556,500
Bridge	1	9,000
Fencing	46,400'	197,000
Landscaping	7	91,000
Rest area	2	89,500
Subtotal		\$1,349,000
x 21%		283,500
Total		\$1,632,500
Regional parks within 2 miles	3	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	8	
Shopping centers and business districts within 2 miles	2	
Jurisdictions: Industry, Los Angeles County		

SEGMENT 2: LEMON AVENUE TO LOS ANGELES COUNTY FAIRGROUNDS (5.9 MILES)

Route: From Lemon Ave., continue east on the north side of the channel, bridging across to the south side at the Southern Pacific RR. Cross Old Brea Canyon Rd. at grade. Continue north on Old Brea Canyon Road across the existing controlled RR crossing to the north side of the channel, continuing east along the north side. Bridge over the channel inlet, cross the private road at grade, and tunnel under Valley Blvd. and Temple Ave., and continue east under the Orange Fwy. (no ramp necessary). The trail parallels Campus Drive from the Orange Freeway to Ridgeway, and would be integrated into the existing linear park there. Cross Ridgeway Blvd. at grade and ramp under the Corona Fwy. (minor modifications required). Continuing on the north side, the trail would tunnel under Ganesha Blvd. and cross Glen ave., Dudley St., Weber St., and Murchison Ave., at grade. At this point the trail would continue on surface streets due to the obstruction created by the San Bernardino Fwy. overcrossing. Follow Murchison Ave. to Orange Grove, travel west on Orange Grove to White Ave., and north on White Ave. under the San Bernardino Freeway. North of this point the trail would follow Thompson Creek (see Class B projects).

<i>Costs</i>		
Asphalt paving	24,500'	\$ 367,500
Ramp ¹	1	45,000
Tunnels (open cut)	3	556,500
Bridge	1	9,000
Fencing	31,800'	134,500
Landscaping	5	65,000
Subtotal		\$1,177,500
x 21%		247,500
Total		\$1,425,000
Regional parks within 2 miles	4	
Neighborhood parks adjacent	3	
Colleges and universities within 2 miles	3	
Secondary schools within 1 mile	7	
Shopping centers and business districts within 2 miles	1	
Jurisdictions: Industry, Pomona, Los Angeles County		

PROJECT TOTALS

Total Cost: \$3,057,500

Regional parks within 2 miles	7
Neighborhood parks adjacent	4
Colleges and universities within 2 miles	3
Secondary schools within 1 mile	15
Shopping centers and business districts within 2 miles	3
Jurisdictions: Industry, Pomona, Los Angeles County	

¹ Ramp under truss span outside of channel, not a tunnel

TABLE 4-3b. SAN JOSE CREEK EQUESTRIAN TRAIL (17.7 MILES)

SEGMENT 1: SAN GABRIEL RIVER TO LEMON AVENUE (10.8 MILES)

Route: From the San Gabriel River crossing, follow the north side, ramp under the San Gabriel River Fwy., and continue under Workman Mill Road (no ramp necessary). Tunnel under 7th St. (difficult tunnel because of drain inlets) and cross the Union Pacific RR at grade. Tunnel under Turnbull Canyon Road and cross the channel at the existing bridge at Parriot Place to the south side. Continue under Hacienda Blvd. (no ramp necessary), cross Stinson Ave., Union Pacific RR, Southern Pacific RR, and Anaheim-Puente Road at grade. Continue under Azusa Ave. (no ramp necessary), bridge over the channel inlet, and tunnel under Nogales St. Cross Santous Ave., Fairway Dr., and Lemon Ave. at grade.

<i>Costs:</i>		
Removal of asphalt	79,000 ¹	\$ 818,000
Ramp	1	89,000
Tunnels (open cut)	3	556,500
Bridge	2	43,500
Fencing	46,400	197,000
Landscaping	7	91,000
Rest area	1	44,500
Staging area	1	192,000
Subtotal		\$1,829,500
x 21%		384,000
Total		\$2,213,500

SEGMENT 2: LEMON AVENUE TO LOS ANGELES COUNTY FAIRGROUNDS (7.1 MILES)

Route: From Lemon Ave. continue on the south side of the channel and cross the Southern Pacific RR, Old Brea Cyn. Road, and a private road at grade (signs only). Bridge over the channel inlet, tunnel under Valley Blvd. and Temple Ave., and continue under the Orange Fwy. (no ramp necessary). Just east of the Orange Fwy., bridge across the channel to the north side and continue beside the proposed bicycle trail. Cross back to the south side on the existing bridge at Ridgeway Blvd. at grade and ramp under the Corona Fwy. (minor modifications required). Continue on the south side crossing Ganessa Blvd., Glen Ave., Dudley St. and Weber St. at grade. The trail would leave the channel ROW at Murchison Ave., following Murchison west to the existing tunnel under the San Bernardino Fwy. This is a small tunnel (about 8' by 8'), and it would be necessary to dismount and lead the horse through. Improvements would be needed at the tunnel entrance. North of the freeway the trail would travel to the east along the freeway to Ganessa Park.

<i>Costs:</i>		
Removal of asphalt	7,000 ¹	\$ 54,500
Ramp ¹	1	45,000
Tunnels (open-cut)	4	830,000
Tunnel improvements (San Bern. Fwy.)	1	50,000
Bridges	2	15,500
Fencing	34,000 ¹	159,000
Landscaping	5	65,000
Rest areas	1	44,500
Subtotal		\$1,283,500
x 21%		265,500
Total		\$1,529,000

TOTAL PROJECT COST: \$3,742,500.

¹ Ramp under bridge span outside of channel, not a tunnel.

CLASS B PROJECTS

- **Arroyo Calabasas Bicycle and Equestrian Trails**
- **Arroyo Seco Bicycle and Equestrian Trails**
- **Bell/Chatsworth/Dayton Creek Bicycle and Equestrian Trails**
- **Sawpit/Buena Vista Bicycle and Equestrian Trails**
- **Thompson Creek Bicycle and Equestrian Trails**
- **Tujunga Wash Bicycle and Equestrian Trails**

ARROYO CALABASAS BICYCLE AND EQUESTRIAN TRAILS

Trails along the Arroyo Calabasas would provide a major connection between the proposed backbone system and the Santa Monica Mountains. Development of a park system in these mountains has a high priority at the state level, and there is also the possibility that a National Recreational Area could be created there. Bicycle and equestrian trails are being planned for the area. Access to these trails from outside the Santa Monica Mountains is a major concern of park planners. The Arroyo Calabasas could be an important link to these trail systems from the San Fernando Valley.

The equestrian trail, in particular, would be of major significance. Unlike bicyclists, who otherwise would gain access to the area on city streets, equestrians currently have no trail connection from the San Fernando Valley to the Santa Monica Mountains. There is strong interest among the riders of the area in establishing such a connection. Together with the proposed Bell/Chatsworth/Dayton equestrian trail, the Arroyo Calabasas trail would link the existing trail system in the western San Fernando Valley to the Santa Monica Mountains.

These trails would also provide access to the proposed regional backbone system from adjacent residential areas, thereby linking these areas to the Chatsworth Reservoir and the Sepulveda Basin Recreational Area.

A major problem to be resolved in establishing these trails would be the connection of the Los Angeles River confluence with the channel upstream of Topanga Canyon Boulevard. The channel is covered by a shopping center from Vanowen Street to Topanga Canyon, both of which are heavily traveled streets. Bicyclists could cross at the intersection, but this would not be desirable for equestrians. It is proposed that tunnels be built under Topanga Canyon and Vanowen, and that an attempt be made to obtain a 12-foot easement along the edge of the shopping center parking lot for travel between the tunnels. While this is not a desirable arrangement, all other alternatives appear to involve the use of city streets by horses for distances of a half-mile or more. Given the importance of the equestrian trail along this channel, emphasis should be placed on obtaining the necessary easement from the shopping center. If a 20-foot easement could be obtained, the bicyclists would also use this route and could then avoid the heavily traveled streets.

It would also be necessary for bicyclists to make use of city streets between Victory Boulevard and Fallbrook Avenue, since there is access along only one side of the channel here and at the Ventura Freeway crossing, where the Valley Circle Drive bridge across the freeway would be used. Equestrians would make use of the channel floor to cross under the freeway.

TABLE 4-4a. ARROYO CALABASAS BICYCLE TRAIL (3.9 MILES)

Route: From the north side of the Los Angeles River go north along Ball Creek 500' to the existing bridge, then return south along Ball Creek to the north side of Arroyo Calabasas. Travel southeast along the channel to Vanowen Street, then west along Vanowen and south on Topanga Canyon Boulevard to re-enter the channel right-of-way. Travel south along the channel to Victory, then continue west on Victory to Fallbrook Ave., and south on Fallbrook Ave. to the channel right-of-way. Continue on the north side, crossing the Woodlake Ave./Burbank Blvd. intersection, Mariano St., Canzonet St., and Valley Circle Drive at grade. Continue on Valley Circle Dr. over the freeway to Avenue San Luis, then east on Avenue San Luis to re-enter the Dry Canyon channel right-of-way on the east side. Continue to the end of the channel.

<i>Costs:</i>		
Asphalt paving	1,300'	\$ 19,500
Fencing	10,600'	45,000
Landscaping	9	117,000
Rest area	1	44,500
Subtotal		\$226,000
x 21%		47,500
Total		\$273,500

Regional parks within 2 miles	0
Neighborhood parks adjacent	0
Colleges and universities within 2 miles	1
Secondary schools within 1 miles	4
Shopping centers and business districts within 2 miles	4
Jurisdiction: Los Angeles City	

TABLE 4-4b. ARROYO CALABASAS EQUESTRIAN TRAIL (3.9 MILES)

Route: From the trail on the south side of the Los Angeles River follow the channel until it becomes covered by school playground. (At the school playground it will be necessary to obtain an easement through to Vanowen St.) Tunnel under Vanowen St. and follow the side of the Topanga Plaza Shopping Center parking lot (it would be necessary to obtain an easement across the parking lot). Tunnel under Topanga Canyon Blvd. Tunnel under Victory Blvd., cross Shoup Ave. at grade (signs only), and tunnel under Fallbrook Ave. Cross Mariano St. and Canzonet St. at grade, tunnel under Valley Circle Drive, and ramp to the channel floor. Continue on the channel floor under the Ventura Fwy., then ramp up to the west side of the channel. Continue to the end of the trail.

<i>Costs:</i>		
Removal of asphalt	14,500'	\$113,000
Fencing	15,500'	66,000
Landscaping	9	117,000
Rest area	1	44,500
Subtotal		\$340,500
x 21%		71,500
Total		\$412,000

ARROYO SECO BICYCLE AND EQUESTRIAN TRAILS

Bicycle and equestrian trails along the Arroyo Seco Channel would provide access from the proposed trail backbone along the Los Angeles River to the extensive park system within the Arroyo Seco. These trails would also lead to the proposed Devil's Gate Recreational Area and farther north to the San Gabriel Mountains.

The Arroyo Seco Gorge is one of the most attractive settings within the LACDA channel system for recreational use. It contains a large amount of developed parkland that would be appealing to cyclists and equestrians, as well as natural hillsides and a small, unchanneled, repair area.

Besides having excellent recreational potential, the bicycle trail would also provide a transportation corridor for the densely populated area through which it passes. At its north end, this corridor would lead to the Pasadena business district. At its south end, the trail would provide access to the Elysian Park area and, through its connection with the proposed Los Angeles River trail, to the south-central industrial district and central business district of Los Angeles.

Trails are proposed only from the Los Angeles River confluence to the Pasadena Avenue crossing in South Pasadena. There is an existing equestrian trail to the north at this point that allows travel as far as the San Gabriel Mountains. A bicycle trail farther to the north is not proposed for two reasons. There is currently extensive use of existing streets along the Arroyo Seco by bicyclists, and there does not appear to be a significant need for a trail. Second, a paved trail along the channel north of San Pasqual Street would detract from the scenic quality of the gorge, which is relatively undisturbed from San Pasqual to Holly Street. This is one of the few remaining sections of undeveloped, riparian canyon near the central urban area, and efforts are being made to preserve parts of it and perhaps to restore them to a relatively natural state.

From the Los Angeles River confluence to the southernmost of the two Pasadena Avenue crossings, there is little or no room along the sides of the channel for trails. This is also true of much of the distance from the footbridge south of Griffin Avenue to Via Marisol. In these two areas, it would be necessary to locate both trails on the bottom of the channel. There is a low-flow channel in these sections, and the main channel is wide enough that travel along the floor would not be unpleasant.

The Pasadena Freeway is adjacent to the channel on its northwest side for about the first half of the channel length. Therefore, trails are located only on the southwest side or on the channel floor. The proposed trails would leave the channel right-of-way in several places to pass through adjacent parkland. The entire cost of the proposed trail is included in the cost estimate, but those parts of the trail outside the channel right-of-way probably could not be funded under the Code 710 cost-sharing program.

Plans for a bike path along the Arroyo Seco between the two Pasadena Avenue crossings are being prepared by the Los Angeles City Transportation Department. Funding is anticipated for the 1980-81 fiscal year.

TABLE 4-5a. ARROYO SECO BICYCLE TRAIL (4.3 MILES¹)

Route From the Los Angeles River confluence, travel northeast on the southeast side of the channel floor. Riders would enter from the proposed Los Angeles River bicycle trail, which would also be on the channel floor at this point, or down the existing ramp to the channel floor (improvements to the low-flow channel and a bridge across the low-flow would be needed at this point. There would also be a bridge across the Los Angeles River low-flow channel). Ramp up to the south side of the channel east of Pasadena Ave. Follow the south side of the channel through Heritage Square to Homer Street. Travel north on Homer Street to the regional park, then continue north through the park (construction of a trail would be required) to the footbridge west of Griffen. Ramp to the channel floor west of the footbridge, and travel east on the channel floor until east of Via Marisol. Ramp up to the south side of the channel and cross into the park. Travel through the park on the existing park road to Ave. 60. East of the Ave. 60 underpass a trail would be required through the park to the tunnel under the freeway access ramp. From east of the access ramp, follow the park maintenance road to Marmion Way. Cross Marmion at grade and travel through the park (construction of trail required) to Pasadena Ave. East of the Pasadena, Ave. underpass, follow the existing equestrian trail up the hill to Pasadena Ave. Travel alongside Pasadena Ave. to Arroyo Dr. Continue past this point on city streets.

<i>Costs</i>		
Concrete paving 3"	8,800'	\$176,000
Asphalt paving within ROW	2,400'	36,000
Asphalt paving outside ROW	8,300'	124,500
Ramps to channel floor (trap. chan.)	3	180,000
Low-flow crossings	2	11,000
Subtotal		\$527,500
x 21%		111,000
Total ²		\$638,500
Regional parks within 2 miles	2	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	2	
Shopping centers and business districts within 2 miles	1	
Jurisdictions: Los Angeles City, South Pasadena, Pasadena		

¹ Of the 4.3 mile length of this trail, 7,600' would be on the channel floor, 3,300' alongside the channel within channel ROW, 6,400' on park land, and 5,400' on city or park streets.

² The total cost of this project includes trails within the park and outside of the channel ROW. This part of the costs could probably not be cost-shared under the Cyle 710 program.

TABLE 4-5b. ARROYO SECO EQUESTRIAN TRAIL (3.9 MILES¹)

Route From the Los Angeles River confluence, travel northeast on the northwest side of the channel floor. Riders would enter from the proposed Los Angeles River equestrian trail, which would also be on the channel floor at this point. Horses would travel on the northwest side of the channel because they can cross the shallow low-flow channel easily without a bridge, whereas bicycles would require a bridge. Ramp up to the south side of the channel east of Pasadena Ave. Follow the south side of the channel through Heritage Square, ramping down to the invert west of Ave. 43. Ramp up to the south side 200 yards east of Ave. 43 and continue along the channel to the footbridge west of Griffen. Ramp to the channel floor west of the footbridge, and travel east on the channel floor until east of Via Marisol. Ramp up to the south side and continue through the park, passing through the Ave. 60 underpass and the tunnel under the freeway access ramp at Ave. 60. From east of the access ramp, travel alongside the park maintenance road to Marmion Way. Cross Marmion at grade and travel to the park to Pasadena Ave. Continue north on the existing equestrian trail.

<i>Costs</i>		
Concrete paving 3"	9,940'	\$199,000
Ramps to channel floor (trap. chan.)	5	300,000
Subtotal		\$499,000
x 21%		105,000
Total ²		\$604,000

¹ Of the 3.9 mile length of this trail, 9,950' would be on the channel floor, 6,150' alongside the channel within channel ROW, and 4,700' on park land.

² The total cost of this project includes trails within the park and outside of the channel ROW. This part of the costs could probably not be cost-shared under the Cyle 710 program.

BELL/CHATSWORTH/DAYTON CREEK BICYCLE AND EQUESTRIAN TRAILS

An equestrian trail along this route would provide a major connection between the backbone trail system and the area of heavy equestrian activity in the western San Fernando Valley. The trail would provide access from the existing equestrian trail system in that area to proposed connections to the Santa Monica Mountains (along Arroyo Calabasas) and the Sepulveda Basin (along the Los Angeles River). Such a connection is a current, major goal of equestrians in the area.

Both trails would connect the backbone system to the proposed Chatsworth Reservoir Recreational Area. The bicycle trail would serve both recreational and transportation needs by linking residents of the area with parks, schools, and two major shopping centers.

Both of the trails would extend access to the backbone system to a larger area of the San Fernando Valley.

The trail routes are relatively unobstructed to a point near Orcutt Ranch Park. Here bicycles would transfer to city streets, and it would be necessary for equestrians to use Justice Street for a short distance to bypass a covered section of channel. The equestrian trail would pass through the park on a maintenance road.

SAWPIT/BUENA VISTA BICYCLE AND EQUESTRIAN TRAILS

Trails along these channels would connect the upper end of the Rio Hondo trails at Peck Reservoir to the San Gabriel trails at Santa Fe Reservoir. The only other connection between these major routes is located 8½ miles to the south at the Whittier Narrows. Completion of this connection would also form trail loops about 21 miles long for bicyclists and equestrians.

TABLE 4-6a. BELL/CHATSWORTH/DAYTON CREEK BICYCLE TRAIL (2.6 MILES)

Route: From the proposed Los Angeles River Trail ending at Owensmouth Ave., continue on the north side of the channel, bridging across to the south side over the existing pedestrian bridge south of Topanga Canyon Blvd. Tunnel under Topanga Cyn. Blvd., continuing half way to Shoup Ave., then bridging back to the north side and tunneling under Shoup Ave. Continue on the east side of Chatsworth Creek, tunneling under Sherman Way and Satcoy St. Bridge across the channel to the north side of Dayton Creek and travel west to Woodlake Ave. Transition to city streets west of Woodlake Ave.

<i>Costs:</i>		
Asphalt Paving	12,000'	\$ 180,000
Tunnels (open cut) ¹	4	711,000
Bridges	1	7,000
Fencing	6,600'	28,000
Landscaping ¹	6	78,000
Subtotal		\$1,004,000
x 21%		211,000
Total		\$1,215,000
Regional parks within 2 miles	1	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	3	
Shopping centers and business districts within 2 miles	4	
Jurisdiction: Los Angeles City		

¹ One tunnel and two landscaped areas are shared with the equestrian trail. The total cost (\$335,000) is divided equally between the two trails.

TABLE 4-6b. BELL/CHATSWORTH/DAYTON CREEK EQUESTRIAN TRAIL (3.4 MILES)

Route: From the proposed Los Angeles River equestrian trail ending at Owensmouth Ave., bridge over the Arroyo Calabasas to the south side of Bell Creek. Tunnel under Topanga Canyon Blvd. and Shoup Ave. Bridge to the west side of Chatsworth Creek. Follow Chatsworth Creek to the north, tunneling under Sherman Way and Satcoy St.

Travel west along the south side of Dayton Creek, crossing Woodlake at grade. Continue west along the dirt strip between the street and the channel. Move south onto the street for about 150 feet to go around the houses that cover the channel near the park entrance (if the street cannot be used, it would be necessary to cross to the north side of the channel at this point and grade a path along the toe of the hill behind the houses). Cross to the north side of the channel over the existing bridge at the park entrance. Follow the maintenance road through the park. Cross Roscoe at grade. Follow the north side of the channel to Valley Circle Blvd., joining the existing equestrian trail to the north at this point.

<i>Costs:</i>		
Removal of asphalt	5,000'	\$ 39,000
Tunnels (open cut) ¹	4	711,000
Bridges	2	26,500
Fencing	6,600'	28,000
Landscaping ¹	6	78,000
Subtotal		\$ 882,500
x 21%		185,500
Total		\$1,068,000

¹ Same as table 1 above.

TABLE 4.7a. SAWPIT/BUENA VISTA BICYCLE TRAIL (2.9 MILES)

Route: From Peck Water Conservation Park, tunnel under Peck Rd. to the west side of Sawpit Channel. Cross Live Oak and Longden Ave at grade at the existing signals, crossing to the east side of the channel at Longden. Continue north to the Buena Vista channel, then follow Buena Vista Channel on the south side to Buena Vista Street. Cross at grade. Follow the channel to the northeast to the point where it enters the spreading basin, and climb to the maintenance road that borders the spreading basin. Follow this road to the southeast and then to the northeast to the existing tunnel under the freeway. Cross under the freeway to the east, and follow the paved maintenance road to the existing San Gabriel River bicycle trail.

<i>Costs</i>		
Asphalt paving	12,500'	\$ 187,500
Tunnel	1	175,000
Fencing ¹	5,300'	11,500
Landscaping ¹	3 locations	39,000
Subtotal		\$ 413,000
x 21%		86,000
Total ¹		\$ 499,000

Regional parks within 2 miles	1
Neighborhood parks adjacent	1
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	2
Shopping centers and business districts within 2 miles	0

Jurisdictions: Monrovia and Irwindale

¹ If the bicycle and equestrian trails were built together, the landscaping and 2,800' of fencing would be shared. In this event, the total cost of the combined projects would be \$25,500 less than the sum of their totals.

TABLE 4.7b. SAWPIT/BUENA VISTA EQUESTRIAN TRAIL (2.3 MILES)

Route: From Peck Water Conservation Park, tunnel under Peck Rd. to the east side of Sawpit Channel. Ramp to the channel floor south of Live Oak, and travel north on the floor (6" concrete paving required) until north of Longden. Ramp up to the east side. Continue north beside the bicycle trail to the Buena Vista Channel, then follow Buena Vista Channel on the south side to Buena Vista Street. (Note: it might be necessary to obtain an easement from the adjacent sand and gravel operation to travel along the edge of their property, since there would be minimal space for both trails along the single access road. There is a large open field between the channel and the gravel pit.) Cross Buena Vista Street at grade. Follow the channel to the northeast to the point where it intersects with the existing San Gabriel River equestrian trail at the spreading basin levee.

<i>Costs</i>		
Concrete paving 6"	850'	\$ 28,500
Tunnel	1	175,000
Ramp to channel floor, vert. chan.	2	66,500
Fencing ¹	5,300'	11,500
Landscaping ¹	3 locations	39,000
Subtotal		\$ 321,000
x 21%		67,500
Total ¹		\$ 388,500

¹ Same as Note 1 above, bicycle trail

THOMPSON CREEK BICYCLE AND EQUESTRIAN TRAILS

Trails along Thompson Creek would connect the proposed regional backbone along San Jose Creek to the San Gabriel Mountains. They would extend access to the backbone system through Pomona, La Verne, and Claremont. The northern part of this area has considerable equestrian activity, and there are a large number of bicyclists in the vicinity of the Claremont Colleges.

Completion of these trails would link the proposed backbone system to the existing bicycle and equestrian trails along the upper part of Thompson Creek.

The bicycle trail would provide a transportation route linking residential areas along the channel to the Los Angeles County Fairgrounds, commercial areas along Garey Avenue and Foothill Boulevard, and two large parks.

A connection to the Los Angeles Forest equestrian trail system would make possible several large equestrian trail loops. It should be noted that the high cost of the equestrian trail is due primarily to the need for four tunnels in a one-mile distance between McKinley and Arrow Highway.

TABLE 4-8a. THOMPSON CREEK BICYCLE TRAIL (4.9 MILES¹)

Route: From the end of the proposed San Jose Creek bicycle trail at the San Bernardino Freeway, follow White Avenue north, re-entering the channel right-of-way on the west side where White crosses Thompson Creek. Tunnel under LaVerne Ave. and the Arrow Highway. Cross the two sets of railroad tracks, Bonita Ave., and Grove Ave. at grade. Tunnel under Foothill Blvd. and cross Garey Ave., Baseline Rd., and Mountain Ave. at grade. Cross to the east side of the channel at Mountain Ave. and continue north on the existing bicycle trail to Pomello Dr. Cross Pomello at grade and continue on the east side to the Thompson Reservoir.

Improvements would be made at Ganesha and Sycamore Canyon Parks to provide rest areas for equestrians.

<i>Costs:</i>		
Asphalt paving	18,500'	\$ 277,000
Tunnels	3	556,500
Fencing	18,500'	78,500
Landscaping	4 locations	52,000
Rest area improvements	2 locations	44,500
Subtotal		\$1,008,500
x 21%		212,000
Total		\$1,220,500

Regional parks within 2 miles	4
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	2
Secondary schools within 1 mile	6
Shopping centers and business districts within 2 miles	1
Jurisdictions: Pomona, Claremont, Los Angeles County	

¹ This distance includes 0.7 mile of existing bicycle trail and 0.7 mile of city street.

TABLE 4-8b. THOMPSON CREEK EQUESTRIAN TRAIL (5.6 MILES¹)

Route: From the tunnel under the San Bernardino Freeway at the north end of the proposed San Jose Creek trail, follow the freeway east to the paved alley along the freeway, then continue east along the alley to Ganesha Park. Travel north through Ganesha Park (not necessarily along the channel) to McKinley. Tunnel under McKinley. Travel north through the Fairgrounds parking lot on the west side of the channel to White. Tunnel under White to the east side of the channel. Continue north, tunneling under LaVerne and the Arrow Highway. Cross the two railroad tracks, Bonita, and Grove Avenue at grade. Tunnel under Foothill Blvd. and cross Garey, Baseline, and Mountain at grade (signs only). Continue north on the existing equestrian trail to Pomello Drive, crossing Pomello at grade. Continue to the reservoir, connecting near there with existing dirt roads leading to Angeles Forest trails.

Improvements would be made at Ganesha and Sycamore Canyon Parks to provide rest areas for equestrians.

<i>Costs:</i>		
Tunnels (open cut)	5	\$1,020,000
Fencing	18,500'	78,500
Landscaping	4 locations	52,000
Rest area improvements	2 locations	44,500
Subtotal		\$1,008,500
x 21%		212,500
Total		\$1,220,500

¹ This distance includes 0.7 mile of existing equestrian trail and 0.6 mile within Ganesha Park.

TUJUNGA WASH BICYCLE AND EQUESTRIAN TRAILS

Trails along the Tujunga Wash would connect the proposed backbone system with the Hansen Dam Recreation Area. Except for the Whittier Narrows, this is the most heavily used Corps of Engineers' recreational facility in the Southwest (Ref 4-8). The route would extend the regional trail system through a heavily populated part of the San Fernando Valley, thus providing increased access to the proposed backbone trails. These trails, together with the trails proposed for the Los Angeles River, would link the three major recreational facilities of the northwest Los Angeles region, Griffith Park, the Sepulveda Basin, and the Hansen Dam Recreation Area.

The bicycle trail would serve transportation as well as recreational purposes, offering a commuter route for students of Los Angeles Valley College and Grant High School, as well as a route to business and commercial areas for the residents of the many single- and multiple-family homes along the wash.

An equestrian trail linking Griffith Park to Hansen Dam would provide a major benefit for the many riders in the Griffith Park area. They currently are confined to the park for riding because of the lack of regional trail connections to the Griffith Park trail system.

A recreational master plan (Ref 4-9) was prepared for the Tujunga Wash in 1975 by the U.S. Army Corps of Engineers. Phase I of this plan, which has been implemented, includes a one mile long greenbelt rest area with bicycle and hiking trails. Later phases of the plan would extend the trails north to the Hansen Dam and south to the Los Angeles River. The trail routes recommended here are similar to those described in the master plan; however, there are two exceptions: an equestrian trail has been added, and greater use of the channel floor is recommended in order to reduce the number and length of tunnels needed.

In general, the channel is well suited to trail development because of its wide and almost completely unused right of way. There are numerous obstructing streets, however, including a freeway and three street intersections. These obstructions would make the development of trails on the Tujunga Wash relatively expensive.

The wide right of way would allow bicycle and equestrian trails to be placed on the same side with adequate separation, which would reduce the cost of tunnel

construction. Wider tunnels would be needed for the combined use of the two trails, but this would be less expensive than constructing a separate tunnel for each trail. It would also be possible in most cases to locate the trails far enough from the edge of the channel to avoid the need for increasing fence heights.

Use of the channel floor is recommended in most places where unusually long tunnels would be needed. At the Burbank/Coldwater intersection, however, a tunnel is recommended despite the 180-foot length that would be required. The tunnel would provide bicyclists with a continuous, lead-in strip to the college and high school from Whitsett Avenue to Vanowen on a year-round basis.

There is a large amount of single-family housing along both sides of the channel, and it is likely that some of the neighbors would object to the inclusion of trails along the channel. The houses are generally level with the channel right-of-way and are separated from it by concrete block walls for about a third of their adjacent property length. Improvements in separation may be needed in some places. The channel floor might be used in areas where there is particularly strong opposition to the trails.

TABLE 4-9a. TUJUNGA WASH BICYCLE TRAIL (9.4 MILES)¹

Route: From the proposed bicycle path along the south side of the Los Angeles River, cross the river to the north at Radford Ave., continuing north to enter the Tujunga Wash right-of-way on the west side. Tunnel under Moorpark and Laurel Canyon. Bridge to the east side of the river north of Laurel Canyon and continue north through the existing Ventura Fwy. underpass. Ramp to the channel floor south of Riverside and back up to the east side north of Whitsett. Tunnel under Magnolia and Chandler. A long tunnel (about 180') would be required at the Burbank/Goldwater Canyon intersection. Follow the existing bicycle trail north to Oxnard. Tunnel under Oxnard and Victory, and cross Ethel at grade.

Ramp to the channel floor to cross under the Vanowen/Fulton intersection, then back up to the east side. Tunnel under Sherman. Ramp to the floor south of the railroad bridge and up again north of Saticoy. Cross Cantara at grade (signs only), and tunnel under Roscoe and Arleta. Ramp to the channel floor to cross under the Golden State Fwy., then back up to the west side north of Laurel Canyon. Cross under San Fernando through the existing underpass, then tunnel under the railroad track and Glenoaks. Continue north to the dam, following the existing equestrian trail east into the park.

A rest stop would be included near the shopping center at Ethel Street.

<i>Costs:</i>		
Tunnels	12	\$2,581,000
Asphalt paving	35,500'	532,500
Concrete paving 6"	2,620'	88,000
Ramps to chan. floor (vert. chan.)	8	532,000
Bridge at Laurel Canyon	1	34,500
Landscaping	6 locations	78,000
Rest area	1	192,000
Subtotal		\$4,038,000
x 21%		848,000
Total ²		\$4,986,000

Regional parks within 2 miles	3
Neighborhood parks adjacent	1
Colleges and universities within 2 miles	1
Secondary schools within 1 mile	5
Shopping centers and business districts within 2 miles	3
Jurisdiction: Los Angeles City	

¹ Includes 0.3 mile of city street and 0.5 mile of existing bicycle trail.

² See Note 1, Table 4-9b, below.

TABLE 4-9b. TUJUNGA WASH EQUESTRIAN TRAIL (9.4 MILES)

Route: From the proposed equestrian trail along the north side of the Los Angeles River, turn north up the east side of the Tujunga Wash. Tunnel under Moorpark and Laurel Canyon, and continue north through the Ventura Freeway underpass. Ramp to the channel floor south of Riverside and back up to the east side of the channel north of Whitsett. Tunnel under Magnolia and Chandler. Ramp to the channel floor south of Burbank and back up to the east side north of Oxnard. Tunnel under Victory and cross under Ethel through the existing tunnel (it would be necessary to lower the dirt floor about two feet). Continue north, ramping to the channel floor to cross under the Vanowen/Fulton intersection.

Tunnel under Sherman, then ramp to the floor to cross under the railroad bridge and Saticoy. Continue on the east side, crossing Cantara at grade (signs only) and tunneling under Roscoe and Arleta. Ramp to the channel floor to cross under the Golden State Fwy., then back up to the west side north of Laurel Canyon. Cross under San Fernando through the existing underpass, then tunnel under the railroad track and Glenoaks. Continue north to the dam, joining the existing equestrian that leads into the park.

A rest stop would be included near the shopping center at Ethel Street.

<i>Costs</i>		
Tunnels	10	\$2,087,500
Concrete paving 6"	2,620'	88,000
Ramps to chan. floor (vert. chan.)	10	665,000
Landscaping	6 locations	78,000
Rest area	1	192,000
Subtotal		\$3,110,500
x 21%		653,000
Total ¹		\$3,763,500

¹ Many facilities such as tunnels and the rest area would be shared by bicyclists and equestrians. If both trails were built, the combined cost would be \$7,096,000. This is \$1,653,500 less than the combined costs of the two projects built separately.

CLASS C PROJECTS

- Aliso Creek Bicycle and Equestrian Trails
- Bell Creek (West End) Bicycle and Equestrian Trails
- Big Dalton Wash (Northern End) Bicycle Trail
- Brown's Creek Bicycle and Equestrian Trails
- Bull Creek Bicycle Trail
- Burbank Western/La Tuna Canyon/Hansen Heights Bicycle and Equestrian Trails
- Compton Creek Bicycle Trail
- Coyote Creek/North Fork Bicycle Trail
- Eaton Wash Bicycle and Equestrian Trails
- Laguna Dominguez Bicycle Trail
- Limekiln Creek Equestrian Trail
- Lopez Canyon Bicycle Trail
- Pacoima Wash Bicycle Trail
- Santa Anita Wash Bicycle Trail
- Sawpit Wash
- Walnut/Big Dalton/San Dimas Bicycle Trail
- Walnut Creek (East of Big Dalton) Bicycle Trail and Equestrian Underpass

ALISO CREEK BICYCLE AND EQUESTRIAN TRAILS

Trails along Aliso Creek would extend the proposed regional trail system from the Los Angeles River backbone across the San Fernando Valley to the San Gabriel foothills. Valley residents would have improved access via this route to other proposed channel trails leading to the Sepulveda Basin, the Santa Monica Mountains, Chatsworth Reservoir, and the San Gabriel Mountains.

The bicycle trail would improve bicycle transportation to parks, schools, businesses, and shops in the vicinity of the channel. The equestrian trail would link the Twelfth District backbone trail system of the City of Los Angeles to the proposed regional trail backbone along the Los Angeles River. The upper part of the Aliso Creek trail would pass through an area of heavy equestrian activity, and would provide a useful route for riders in the area. Together with other proposed channel trails, Aliso Creek could form a part of several large trail loops.

There is an ample amount of space available within the Aliso Creek ROW. The channel is obstructed in numerous places by crossing streets, however, and many tunnels and at-grade crossings would be required to complete the trails.

BELL CREEK (WEST END) BICYCLE AND EQUESTRIAN TRAILS

Trails along Bell Creek from the Chatsworth Creek confluence west to Valley Circle Drive would extend the regional trail system to the western end of the LACDA channel system. While this two-mile trail corridor would not link the regional system to any major recreational facility, it would provide residents of the area with improved access to the regional trail backbone.

The bicycle trail would serve both recreational and transportation needs by linking residential areas to several parks and schools and improving access to two major shopping centers. The equestrian trail would provide an additional local route for the many riders in the western San Fernando Valley area, and possibly an eventual connection to a southern extension of the existing trail on Valley Circle Boulevard above Chatsworth Reservoir.

TABLE 4-10a. ALISO CREEK BICYCLE TRAIL (6.4 MILES)

Route: From the north side of the proposed Los Angeles River trail continue north on the east side of Aliso Creek. Tunnel under Vanowen, Sherman Way, and Saticoy. Cross Strathern St. and Wilbur Ave. at grade. Bridge to the west side and tunnel at Roscoe and Parthenia. Cross the Southern Pacific RR at grade. Bridge over Limaskin Creek channel, and continue around the spreading basin. Tunnel under Nordhoff and Plummer. Cross Wilbur Ave. at grade, bridge over Wilbur Creek channel and tunnel at Lassen, Reseda, and Devonshire. Cross Chatsworth and San Fernando Mission Blvd. at grade. Continue north to Aliso Debris Basin.

<i>Costs:</i>		
Asphalt paving	31,600'	\$ 474,000
Tunnels	10	1,824,000
Bridges	3	33,500
Fencing	31,600'	122,000
Landscaping	18	208,000
Rest area	2	89,500
Separation equestrian/bicycle	6,600'	25,000
Subtotal		\$2,776,000
x 21%		583,000
Total		\$3,359,000

Regional parks within 2 miles	3
Neighborhood parks adjacent	3
Colleges and universities within 2 miles	2
Secondary schools within 1 mile	7
Shopping centers and business districts within 2 miles	0
Jurisdiction: Los Angeles City	

TABLE 4-10b. ALISO CREEK EQUESTRIAN TRAIL (6.4 MILES)

Route: From the south side of the proposed Los Angeles River bridge to the west side of Aliso Creek. Tunnel under Vanowen and Sherman Way. Halfway to Saticoy St. cross the channel to the east levee on the existing pedestrian bridge (modification required). Tunnel at Saticoy St. Cross Strathern and Wilbur at grade. Tunnel under Roscoe and Parthenia and cross the SPT RR at grade. Tunnel under Nordhoff and Plummer, and cross Wilbur at grade. Tunnel under Lassen, Reseda, and Devonshire, and cross Chatsworth and San Fernando Mission at grade. Continue north to Aliso Debris Basin.

<i>Costs:</i>		
Tunnels	10	\$1,824,000
Bridges	1	17,000
Fencing	31,600'	122,000
Trail separation	6,600'	25,000
Landscaping	18	208,000
Rest area	2	89,500
Subtotal		\$2,286,500
x 21%		480,000
Total		\$2,766,500

TABLE 4-11a. BELL CREEK (WEST END) BICYCLE TRAIL (2.2 MILES)

Route: From the north side of Bell Creek east of the Chatsworth confluence, bridge over Chatsworth Creek. Cross Fallbrook, Platt, and Valley Circle at grade.

Costs:		
Bridges	20'	\$ 9,000
Landscaping	4 locations	52,000
Subtotal		\$ 61,000
x 21%		13,000
Total		\$ 74,000

Regional parks within 2 miles	1
Neighborhood parks adjacent	3
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	2
Shopping centers and business districts within 2 miles	4
Jurisdiction: Los Angeles City	

TABLE 4-11b. BELL CREEK (WEST END) EQUESTRIAN TRAIL (2.2 MILES)

Route: From the south side of Bell Creek at the Chatsworth confluence, travel west, crossing Fallbrook at grade. Bridge over the South Fork of Bell Creek. Cross Platland Valley Circle at grade.

Costs:		
Removal of asphalt	10,500'	\$ 82,000
Bridges	2 (25' ea.)	22,500
Landscaping	4 locations	52,000
Subtotal		\$ 156,500
x 21%		33,000
Total		\$ 189,500

BIG DALTON WASH (NORTHERN END) BICYCLE TRAIL

While the proposed Walnut/Big Dalton/San Dimas trail would be the primary regional route into the middle San Gabriel Valley area, a trail along the Big Dalton Wash north of the San Dimas confluence would further extend the regional trail system through this area. The trail would link residential areas along the channel to the San Gabriel Mountains to the north and to proposed channel trails leading to the Whittier Narrows to the south. It would also provide access to South Hills Regional Park and a transportation route to schools, businesses, and shops in the vicinity of the channel.

BROWN'S CREEK BICYCLE AND EQUESTRIAN TRAILS

Trails along Brown's Creek would extend the proposed regional trail system from the Los Angeles River backbone across the San Fernando Valley to the San Gabriel foothills. Valley residents would have improved access via this route to other proposed channel trails leading to the Sepulveda Basin, the Santa Monica Mountains, Chatsworth Reservoir, and the San Gabriel Mountains.

The bicycle trail would improve bicycle transportation to shops and businesses in the vicinity of the channel. The equestrian trail would link the Twelfth District backbone trail system of the City of Los Angeles to the proposed regional trail backbone along the Los Angeles River. The upper part of the channel passes through an area of heavy equestrian activity and would provide a useful route for riders in the area. Together with other proposed channel trails, Brown's Creek would form a part of several large trail loops.

There are existing bicycle and equestrian trails along the northern 1.8 miles of the channel.

Trails along Brown's Creek would serve much the same function in a regional system as trails along Aliso Creek. Aliso Creek passes through an area of slightly denser population. Brown's Creek, however, should have a higher priority foot trail development because of its existing trails, the lower incidence of obstructing streets along the route, and the greater concentration of equestrians in its vicinity.

TABLE 4-12. BIG DALTON (NORTH END) BICYCLE TRAIL (6.3 MILES)

Route: From the proposed Walnut/Big Dalton/San Dimas trail at Lark Ellen Ave., travel east along the south side of Big Dalton. Tunnel under Azusa and Arrow, and cross Cerritos at grade. Tunnel under Citrus and cross Gladstone at grade. Tunnel under Barranca and Grand. Continue under the Foothill Fwy. (no tunnel necessary). Tunnel at Glendora, and cross Mauna Loa at grade. Cross Alosta (signal required), the AT/SF. RR, Foothill, Sierra Madre, and Glendora Mountain Road at grade.

<i>Costs:</i>		
Asphalt paving	31,500'	\$ 472,500
Tunnels	6	1,112,000
Fencing	31,500'	134,000
Landscaping	10 locations	130,000
Rest area	1	44,500
Subtotal		\$1,893,000
x 21%		397,500
Total		\$2,290,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	2	
Secondary schools within 1 mile	7	
Shopping centers and business districts within 2 miles	1	
Political Jurisdictions: Glendora, Azusa, Covina, Los Angeles County		

TABLE 4-13a. BROWN'S CREEK BICYCLE TRAIL (3.0 MILES¹)

Route: From the proposed backbone trail along the north side of the Los Angeles River, proceed north along the east side of Brown's Creek. Tunnel under Sherman Way, Saticoy, Roscoe, and De Soto, and cross Parthenia at grade. Tunnel under Nordhoff and cross the SPT RR. Tunnel under Lassen, and continue north on the existing trail.

<i>Costs:</i>		
Asphalt paving	18,500'	\$ 277,500
Tunnels	6	1,113,000
Fencing	18,500'	78,500
Landscaping	9	117,000
Subtotal		\$1,586,000
x 21%		333,000
Total		\$1,919,000
Regional parks within 2 miles	2	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	3	
Shopping centers and business districts within 2 miles	3	
Jurisdiction: Los Angeles City		

¹ This distance does not include the existing bicycle trail.

TABLE 4-13b. BROWN'S CREEK EQUESTRIAN TRAIL (3.0 MILES¹)

Route: From the proposed backbone trail along the south side of the Los Angeles River, bridge to the west side of Brown's Creek. Tunnel at Sherman Way, Saticoy, Roscoe, and De Soto. Cross Variel and Parthenia at grade. Bridge over the Santa Suzana channel inlet, and tunnel under Nordhoff. Cross the SPT RR at grade, and tunnel under Lassen. Continue north on the existing trail.

<i>Costs:</i>		
Tunnels	6	\$1,113,000
Bridges	2 (20', 150')	114,000
Fencing	18,500'	78,000
Landscaping	9	117,000
Subtotal		\$1,422,000
x 21%		298,500
Total		\$1,720,500

¹ This distance does not include the existing equestrian trail.

BULL CREEK BICYCLE TRAIL

A bicycle trail along the Bull Creek ROW would extend the regional trail system from the proposed Los Angeles River backbone north through the central part of the San Fernando Valley. This trail would provide a direct route for valley residents to the Sepulveda Basin Recreation Area and would connect to proposed channel trails leading to the Santa Monica Mountains, the proposed Chatsworth Reservoir Recreation Area, and Griffith Park.

The trail would improve bicycle transportation from residential areas in the vicinity of the channel to shops, businesses, and industries in the central valley area.

An equestrian trail is not recommended for the channel. Areas of heavy equestrian activity are farther to the west in the valley. Also, the channel does not connect to the existing San Fernando Valley equestrian trail system. Sufficient space for a trail does not exist along much of the west side of the channel and the east side would be better used for a bicycle path.

TABLE 4-14. BULL CREEK BICYCLE TRAIL (7.1 MILES¹)

Route: From the proposed Los Angeles River bicycle trail, travel north along the east side of Brown's Creek. Tunnel under Victory, Vanowen, Sherman Way, and Saticoy. Cross Stagg at grade. Tunnel under Roscoe, the Southern Pacific RR, Parthenia, and Nordhoff, and cross the Plummer/Hayvenhurst intersection at grade, using the existing signals. Tunnel under Lassen and Devonshire. Cross Chatsworth and Celtic at grade. Pass under the Simi/San Fernando Valley Freeway (no obstruction). Cross San Fernando Boulevard at grade, and continue west on San Fernando. Turn north on Gothic, and reenter the channel ROW on the west side. Transition to surface streets at Rinaldi.

<i>Costs</i>		
Asphalt paving	33,000'	\$ 495,000
Tunnels (open-cut)	10	1,855,000
Fencing	30,800'	131,000
Landscaping	10 locations	130,000
Rest area	1	<u>44,500</u>
Subtotal		\$2,655,500
x 21%		<u>557,500</u>
Total		\$3,213,000
Regional parks within 2 miles	4	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	1	
Jurisdiction: Los Angeles City		

¹Included in semi-high street trail

BURBANK WESTERN/LA TUNA CANYON/HANSEN HEIGHTS BICYCLE AND EQUESTRIAN TRAILS

There are large concentrations of equestrian facilities and activity at both ends of the Burbank Western Channel. At the south end are a number of stables and an extensive system of trails, tunnels, and bridges around Griffith Park and along the Los Angeles River Channel. At the north end of the channel, the La Tuna Canyon/Shadow Hills area contains one of the heaviest concentrations of horse-owners in the Los Angeles region. Trails from La Tuna Canyon connect to the Hansen Dam area to the north and the Verdugo Mountain trails to the east.

An equestrian trail along Burbank Western would connect the regional trail backbone and the Griffith Park area to the region of heavy equestrian activity around La Tuna Canyon. A trail along the La Tuna Canyon Channel would eliminate the necessity for riders to travel along the sides of La Tuna Canyon Road, which carries an undesirable combination of heavy equestrian and heavy auto traffic. Improvements along the Hansen Heights channel (a tunnel at Sunland is especially needed) would provide better access to the Hansen Dam area.

The Hansen Heights and La Tuna Canyon trails would probably also be parts of the proposed Rim-of-the-Valley trail system that would encircle the San Fernando Valley (see page 4-7). The Hansen Heights and Burbank Western trails would complete a smaller but very important trail loop, including the Tujunga Wash, part of the Los Angeles River trail, Hansen Dam, and Griffith Park.

There is less need for a bicycle trail in this area because bicyclists can travel easily along streets adjacent to the channels, particularly Glenoaks. The existing bicycle path from Morgan Street to Cohasset is interrupted at Buena Vista. City streets must be used to reenter the channel ROW, and the route is difficult to follow. Connecting the two sections of this trail by crossing under Buena Vista on the channel floor would make the trail much more attractive to users.

A bicycle path is recommended along the La Tuna Canyon channel since it would provide a lead-in strip to two schools adjacent to the channel.

The Golden State Freeway is a major obstruction dividing the northern and southern halves of the Burbank Western channel. In order to connect the two halves of the equestrian trail, it would be necessary for riders to

follow a railroad ROW along the freeway to Buena Vista Street and cross under the freeway there, using an existing 8-foot paved sidewalk. A more desirable but much more expensive alternative would be to tunnel under the freeway east of Buena Vista. This would cost about \$627,000 and would require the use of about the same length of rail ROW.

TABLE 4-15a. BUF BANK WESTERN/LA TUNA CANYON BICYCLE TRAIL (2.3 MILES OF NEW TRAIL¹)

Route: Begin on the existing 1.1-mile bicycle path along the Burbank channel from Morgan to Cohasset. An undercrossing would be provided at Buena Vista by ramping to the channel floor south of Buena Vista and back up to the east side of the channel north of the freeway access roads. Transition to city streets at Cohasset, traveling north on Glenoaks. Turn east on Vinedale and enter the La Tuna Canyon channel ROW on the north side. Cross Jordan, Village, Wildwood, and Martindale at grade (signs only). Transition to city streets at La Tuna Canyon Road.

<i>Costs</i>		
Ramps to chan. floor (vert. chan.)	2	\$ 133,000
Concrete paving 6"	500'	16,800
Asphalt paving	11,480'	172,200
Subtotal		\$ 322,000
x 21%		67,500
Total		\$ 389,500
Regional parks within 2 miles	3	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	2	
Jurisdictions: Los Angeles City, Glendale, Burbank		

¹Total length of route, including existing bicycle path and city streets, is 5.4 miles

TABLE 4-15b. BURBANK WESTERN/LA TUNA CANYON/HANSEN HEIGHTS EQUESTRIAN TRAILS (9.8 MILES¹)

Route: From the existing Los Angeles River equestrian trail west of Riverside Dr., travel west through the equestrian park north of the river to Allen Ave., then north on Allen, Chavez, and Linden Streets for 0.3 mile to the Victory St. entrance to the channel ROW (horses are kept on many of the residential lots in this area, and riders frequently use streets in the area). Travel north along the east side of the channel from Victory to Olive, crossing each of the obstructing streets and the railroad at grade (signs only). A retaining wall 3' to 7' high would be necessary for most of this distance because of the steep slope of the access area. Also, it would be necessary to ramp down several feet into the dirt to provide enough clearance under the footbridge south of Providencia, and to ramp over the pipeline obstructing the ROW near this point (3' high).

Cross Olive at grade (signs only), moving to the west side of the channel. Continue north, crossing Magnolia and the two sets of railroad tracks north of Magnolia at grade (signs only). Follow the west side of the Vanowen Street channel to Burbank Blvd. Travel through the Burbank Blvd. underpass on the railroad right-of-way and continue northwest along the rail right-of-way (the Burbank channel goes underground for 1/4 mile at Burbank). Bridge across San Fernando Blvd. and continue northwest to Buena Vista. Cross under the freeway on the southeast side of the Buena Vista underpass and reenter the channel right-of-way on the west side of the channel. Ramp to the channel floor to cross under Buena Vista and the freeway access roads at Buena Vista. Ramp up to the west side of the channel north of the access roads.

Continue north, crossing Cohasset at grade (signs only). Ramp to the channel floor 500' south of Hollywood Way to avoid the steep embankment north of this point. Ramp up to the east side of the channel north of Hollywood Way. Cross Lanark at grade (signs only). Ramp to the channel floor and up again to cross under Glenoaks. Cross Nettleton and Vinedale at grade (signs only), and continue east on the south side of La Tuna Canyon. Cross Jordan, Village, Wildwood, and Martindale at grade (signs only). Tunnel under La Tuna Canyon Rd. and continue east along the channel to the debris basin.

At the Burbank/La Tuna Canyon confluence, the trail would also bridge to the west and follow the west side of the Hansen Heights channel. Cross Penrose, La Tuna Canyon, and Tuxford at grade (signs only). Tunnel under Sunland. Cross Pendleton at grade (signs only), changing to the east side of the channel. Continue to the end of the channel at Stonehurst, joining the currently used path along Stonehurst toward Hansen Dam.

<i>Costs</i>		
Retaining wall 4'	5,100'	\$ 714,000
Ramping under footbridge	1	15,000
Ramping over pipe	1	15,000
Bridge (San Fernando Blvd.)	100'	70,000
Ramps to chan. floor (vert. chan.)	6	399,000
Concrete paving 6"	1,100'	37,000
Tunnel (La Tuna Canyon Rd.)	1	208,500
Subtotal		\$1,458,500
x 21%		306,500
Total		\$1,765,000

¹The total mileage of the trail (9.8) includes 4.2 miles along Burbank Western, 2.3 miles along La Tuna Canyon, 1.4 miles along Hansen Heights, 1.4 miles along railroad ROW, and 0.5 mile through Griffith Park and along city streets

COMPTON CREEK BICYCLE TRAIL

A bicycle trail along Compton Creek would extend the regional trail system into the relatively heavily populated Compton area. The trail would not serve any regional recreational facilities but would improve access to a number of neighborhood parks and playgrounds. In particular, Ramon Gonzales Park north of Rosecrans is very heavily used and the trail would serve as an excellent access route for it. The length of trail from Compton Boulevard to El Segundo Boulevard could be developed as a first-phase project or as a complete project for this purpose.

The channel ROW is already frequently used in places by children for bicycling and as a neighborhood playground. Such use could be enhanced by providing a paved bicycle trail. Existing patterns of use should be analyzed, however, to ensure that improvements do not decrease the recreation potential now afforded neighborhood children.

Major problems which decrease the potential of this channel for bicycle use include the difficulty of a connection to the Los Angeles River trail, the covered section between Alameda and Greenleaf, and the two large intersections which obstruct the channel ROW (Imperial/Central and Avalon/108th). Del Amo Boulevard, a busy street with freeway entrances and exits, would be used by bicyclists to connect to the trail from the Los Angeles River. The only alternative would be a bridge across the river, which would be very expensive because of the channel width at that point. City streets would also be used to detour around the covered section of channel.

Use of the channel floor is not recommended to underpass the two intersections. There is no low-flow channel and there are large amounts of garbage and debris on the channel floor.

An equestrian trail is not recommended for Compton Creek since there are no equestrian facilities or concentrations of horses in the area.

TABLE 4-16. COMPTON CREEK BICYCLE TRAIL (8.8 MILES¹)

Route: From the existing Los Angeles River bicycle trail go west on Del Amo Blvd. for 0.4 mile to the Compton Creek bridge. Enter the Compton ROW on the west side and proceed to the north. Cross Santa Fe Ave. at grade (signs only). Cross the railroad paralleling Alameda and enter Alameda St. traveling north just south of the Redondo Beach Freeway (a detour is necessary because the channel is being covered north of the freeway). Turn left on Greenleaf and travel west to the channel, reentering the ROW on the west side. Cross Oleander at grade (signs only). Tunnel under Alondra (a bridge would be provided across the channel north of Alondra to the playground and school). Tunnel under Compton, Wilmington, Rosecrans, El Segundo, and 120th St. Cross Central and Imperial at grade using the existing signals. Cross 114th, Lanzit, the RR bridge at Lanzit, and McKinley at grade (signs only). Cross Avalon and 108th at grade using the existing signals. Reenter the channel right-of-way from Avalon on the north side. Cross San Pedro at grade (signs only). Transition to city streets at Main.

<i>Costs:</i>		
Asphalt paving	25,370'	\$ 380,550
Tunnels (open-cut)	6	1,250,160
Bridge	80'	34,500
Landscaping	10 locations	130,000
Fencing	28,000'	<u>119,000</u>
Subtotal		\$1,914,000
x 21%		<u>402,000</u>
Total		\$2,316,000
Regional parks within 2 miles	3	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	2	
Jurisdictions: Long Beach, Carson, Compton, Los Angeles City and County		

¹The 8.8-mile total length includes 2 miles of city street

COYOTE CREEK/NORTH FORK BICYCLE TRAIL

The Coyote Creek and North Fork channels would provide a connection to the regional backbone trail system from heavily populated areas east of the San Gabriel River. The trail would improve bicycle access from this area to the coast and to Cerritos County Park, as well as to several neighborhood parks. It would also function as a bicycle transportation route to shops, businesses, and industries. The North Fork portion of the trail passes through a heavily industrialized area and the channel could provide a commuter route to these industries for bicyclists.

These channels are relatively well-suited to trail development because they have trapezoidal sections for most of their lengths and because obstructions by crossing streets are relatively widely spaced compared to many other channels. Only one at-grade crossing (a railroad track) would be required for the entire length of the trail.

The Los Angeles County Road Department has published a preliminary study of use of the Coyote Creek channel for a bicycle path (Ref 4-10).

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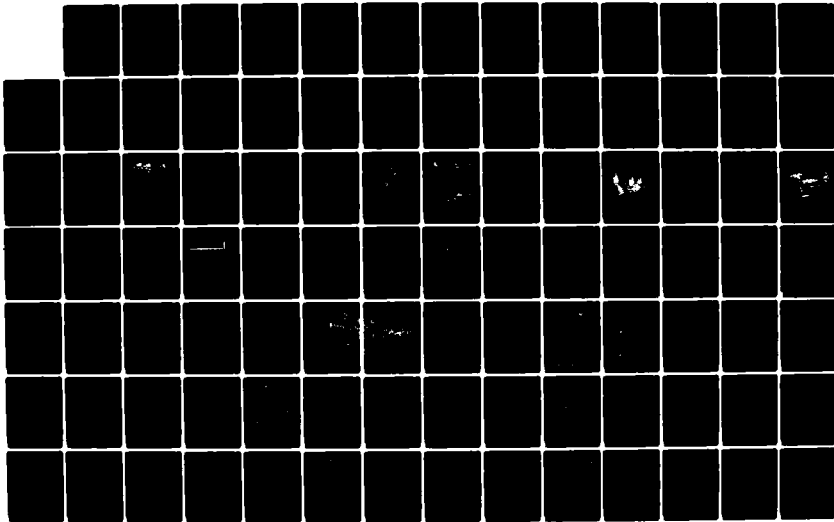
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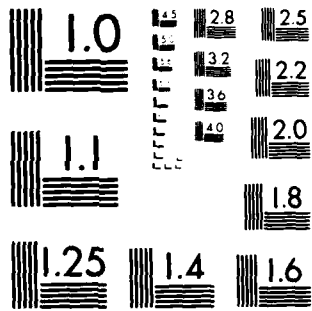
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TABLE 4-17. COYOTE CREEK/NORTH FORK BICYCLE TRAIL (9.8 MILES)

Route: From the existing San Gabriel River bicycle trail, turn north, following the west side of Coyote Creek. Ramp under Katella, the San Gabriel River Freeway, and Spring. Bridge across the Artesia-Norwalk Storm Drain, and ramp under Norwalk, Wardlow, Carson, Centralia, the railroad bridge, and Del Amo (the last two together). Ramp under Carmanita, South St., the Artesia Freeway, and Marquardt. Continue along the North Fork of Coyote Creek, ramping under Artesia. Tunnel under the SPT railroad, Firestone and the Santa Ana Freeway (one tunnel), and Alondra. Ramp under Rosecrans, the AT/SF railroad, and Foster. Cross the rail spur at grade. Ramp under the Imperial Highway and Meyer. Transition to surface streets at Meyer.

<i>Costs:</i>		
Ramps (trap. chan.)	18	\$1,602,000
Tunnels (open cut)	3	625,500
Bridge	80'	46,000
Landscaping	4 locations	52,000
Subtotal		\$2,325,500
x 21%		488,500
Total		\$2,814,000

Regional parks within 2 miles	2
Neighborhood parks adjacent	3
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	2
Shopping centers and business districts within 2 miles	1

Jurisdictions: Long Beach, Hawaiian Gardens, Lakewood,
Cerritos, La Palma, Santa Fe Springs, Los Angeles County

EATON WASH BICYCLE AND EQUESTRIAN TRAILS

An equestrian trail along Eaton Wash would provide a link between the area of heavy equestrian activity around Eaton Canyon Park and the Rio Hondo equestrian trail. It would link equestrian facilities in the Eaton Park area to those at the Whittier Narrows. The trail would connect the Rio Hondo backbone route to existing regional trails that begin at Eaton Canyon Park and travel through the Altadena foothills into the San Gabriel Mountains and to Devil's Gate Reservoir.

Although a bicycle trail along the Eaton Wash would not be as significant from a regional perspective, it would extend the regional bicycle trail system into heavily populated areas of Temple City and Pasadena. It would improve bicycle access to the Whittier Narrows and Eaton Canyon regional parks and would provide a transportation route to local businesses, shops, schools, and industries.

Despite these potential benefits and the large amounts of space available within the channel ROW, the route presents major difficulties to the development of trails. The channel ROW is frequently obstructed by streets and numerous tunnels or at-grade crossings would be required. Use of the channel floor would be necessary in two places to complete the equestrian trail, and detours onto city streets would be required for both equestrians and bicyclists. A 150' bridge would be needed to connect the bicycle trail to the backbone trail along the south side of the Rio Hondo.

Both bicycle and equestrian trails have been proposed for the Eaton Wash in the Eaton Canyon Master Plan (Ref 4-11).

TABLE 4-18a. EATON WASH BICYCLE TRAIL (8.2 MILES¹)

Route: From the trail on the south side of the Rio Hondo, bridge across the Rio Hondo channel to the west side of the Eaton Canyon channel. Ramp to the floor of the channel to cross under Flair, the San Bernardino Freeway, and Loftus (if the channel floor were inundated, the Baldwin Ave. tunnel would be used to cross under the freeway). Ramp back up to the west side of the channel. Tunnel under Valley. Cross the SPT railroad at grade, and tunnel under Temple City, Lower Azusa, Encinita, Rosemead, Broadway, and Las Tunas. Cross Muscatel, Hermosa, Garibaldi, Longden, and Duarte at grade.

Tunnel under Huntington (120' tunnel required) and California. Cross under San Pasqual (no obstruction), and tunnel under Del Mar. Continue north to Colorado, east on Colorado, and north across Colorado at the Kinneloa intersection. Go north on Kinneloa to the railroad underpass under the foothill freeway (the rail through the underpass is not presently used). Follow the freeway northwest to Foothill Blvd. Tunnel under Foothill, travel west to Maple, and reenter the channel ROW on the west side from Maple. Cross Orange Grove and Paloma at grade. Cross Sierra Madre at grade (signals required). Continue north to the Eaton Canyon Dam. Travel around the dam and north along the side of the reservoir on the existing maintenance road. Cross under New York Drive at the existing channel underpass. Travel west from the streambed to the entrance road to Eaton Canyon Park.

<i>Costs:</i>		
Tunnels	1	\$2,322,500
Ramps to chan. floor (vert. chan.)	2	133,000
Concrete paving 6"	1,400'	47,000
Bridge (Rio Hondo)	15'	105,000
Fencing	83,800'	356,000
Landscaping	7 locations	91,000
Rest areas	2	89,500
Signals	1 location	19,000
Subtotal		\$3,163,000
x 21%		664,000
Total		\$3,827,000

Regional parks within 2 miles	5
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	1
Secondary schools within 1 mile	6
Shopping centers and business districts within 2 miles	2
Jurisdictions: El Monte, Temple City, Pasadena, Los Angeles County	

¹Of the 8.2 mile total distance, 0.3 mile would be on the channel floor and 0.3 mile on city streets.

TABLE 4-18b. EATON WASH EQUESTRIAN TRAIL (8.2 MILES¹)

Route: From the equestrian trail along the north side of the Rio Hondo, turn north up the Eaton Canyon channel and ramp to the floor of the channel. Cross under Flair, the San Bernardino Freeway, and Loftus, and ramp up to the east side of the channel. Tunnel under Valley. Ramp to the channel floor south of the SPT railroad, and back up to the east side 200' north of Temple City. Tunnel under Lower Azusa, Encinita, Rosemead, Broadway, and Las Tunas. Cross Hermosa, Muscatel, and Garibaldi at grade. Tunnel under Longden, Duarte, Huntington (120' tunnel required), and California. Cross under San Pasqual (no obstruction), and tunnel under Del Mar.

Leave the channel right-of-way at Colorado and travel east through the parking lot (the existing planted strip along the north edge of the lot would be widened for trail use; the lot appears not to be heavily used). Cross Colorado to the north at the Kinneloa intersection. Follow the dirt strip along the side of Kinneloa to the railroad underpass under the Foothill Freeway (the rail through this underpass is not presently used). Follow the freeway northwest to Foothill Blvd. Tunnel under Foothill Blvd. and travel northwest through the power line ROW (being used by a nursery) to the channel. Reenter the channel ROW on the east side. Cross Orange Grove and Paloma at grade, crossing to the west side of the channel at Paloma. Cross Sierra Madre at grade (signals required). Continue north to the Eaton Canyon Dam. Travel around the dam on the existing maintenance road, and north along the side of the reservoir. Cross under New York Drive at the existing channel underpass and continue north along the unpaved streambed into Eaton Canyon Park.

(Table 4-18b Continued)

<i>Costs:</i>		
Tunnels (open-cut)	12	\$2,531,000
Ramps to chan. floor (vert. chan.)	4	288,000
Concrete paving 6"	2,700'	80,500
Fencing	\$3,800'	385,000
Landscaping	5 locations	85,000
Rest areas	2	89,500
Signals		<u>19,000</u>
Subtotal		\$3,416,000
x 21%		<u>717,500</u>
Total		\$4,133,500

¹Of the 8.2-mile total distance, 0.4 mile would be on the channel floor and 0.3 mile on city streets, along freeway ROW, or in power line ROW.

LAGUNA DOMINGUEZ BICYCLE TRAIL

The Laguna Dominguez channel does not connect directly to the existing backbone trails along the Los Angeles River, but it approaches to within 1.2 miles near its southern end. A connection could be made along Sepulveda or the Pacific Coast Highway, both of which are listed as future bike routes in the Los Angeles City Bicycle Plan. Assuming this connection, a bicycle trail along the channel would extend the regional trail system into the heavily populated southwestern portion of the region.

The bicycle trail would serve recreation purposes, primarily as a lead-in route to Alondra Park, a large and heavily used local facility. Its major use, however, would probably be as a transportation route for commuters. El Camino College, the Northrop Aviation complex, and the Datsun office complex are all adjacent to the channel and a regional shopping center is a few hundred feet from the channel.

Use of the channel floor from Vermont to Redondo Beach Boulevard is recommended as a means of reducing the cost of the trail. The channel is wide here, has a flat, clean bottom, and has a large low-flow channel, so that the floor would remain dry for all but a few days of the year. North of Manhattan Beach Boulevard there is no low-flow channel. The channel floor would be used here only to cross under intersections where lengthy tunnels would be required. A six-inch concrete paving strip would be used to keep the trail above the level of side-flows entering the channel.

The bicycle trail is divided here into two segments. The northern segment could be built as a complete project, since it provides most of the benefits of the combined segments. The southern segment passes no parks, schools, business districts, or major shopping areas, but it would provide a commuter route for workers in the heavy industries along the southern end of the channel.

An equestrian trail is not recommended for this channel because there are few horses in the area, there are no major points of interest for equestrians along the channel, and there are no good means of connecting an equestrian trail to the regional backbone trail along the Los Angeles River.

The Los Angeles County Road Department has studied the possibility of using the Dominguez Channel for a bicycle trail and has proposed a number of alternative

construction solutions. These alternatives include various combinations of bridging and ramping techniques for crossing obstructing streets.

The Laguna Dominguez trail would have much more importance in the regional system if a means were found to connect it to the Ballona Creek trail via Centinela Creek. This would achieve a much-needed cross-town connection through a heavily urbanized area.

There would be a 3½-mile gap, however, from the southern end of the proposed Centinela Creek trail (see Class D projects) to the northern end of the Laguna Dominguez trail. Automobile traffic is heavy in this area, and the use of city streets by bicyclists would probably be difficult.

TABLE 4-19. LAGUNA DOMINGUEZ BICYCLE TRAIL

SEGMENT 1: HENRY FORD AVENUE TO WILMINGTON AVENUE (3.8 MILES)

Route: Enter the channel right-of-way on the west side from Henry Ford Ave. Travel north, passing under Anaheim (no obstruction). Ramp under the Alhambra St. railroad bridge and continue north under the Pacific Coast Highway (no obstruction) to Sepulveda. Ramp under Sepulveda and the pipes crossing at Sepulveda, Alameda, and the railroad bridges at Alameda, and the Wilmington/223rd intersection (long ramps would be needed in all three places).

<i>Costs:</i>		
Asphalt paving	6,840'	\$ 102,500
Resurfacing	8,880'	28,000
Ramps under crossings (trap. chan.)	4 (3 long)	<u>518,000</u>
Subtotal		\$ 648,500
x 21%		<u>136,000</u>
Total		\$ 784,500

Regional parks within 2 miles	0
Neighborhood parks adjacent	0
Colleges and universities within 2 miles	0
Secondary schools within 1 mile	0
Shopping centers and business districts within 2 miles	0
Jurisdictions: Los Angeles City, Carson	

SEGMENT 2: WILMINGTON AVENUE TO 116th STREET (11.8 MILES¹)

Route: Continue north along the west side, ramping under the railroad bridge and the pipe crossing that obstructs the San Diego Freeway underpass. Ramp under Carson, 213th, Avalon, Main, Figueroa, and 190th. Cross under the Harbor Freeway (no obstruction). Cross 182nd at grade (signs only), changing to the east side of the channel at the 182nd St. bridge. Ramp to the channel floor south of Vermont. Continue on the channel floor to the north side of Redondo Beach Blvd. Access ramps to the channel floor would be provided at Normandy, Western, Gramercy, Van Ness, and Crenshaw.

Bridge across the low-flow channel north of Redondo Beach and ramp up to the west side of the channel. Continue north through Alondra Park to Manhattan Beach Blvd. Tunnel under Manhattan Beach and Compton. Cross 147th at grade (signs only). Ramp to the channel floor and back up to the west side to cross under the Crenshaw/Rosscrans intersection. Tunnel under 136th and El Segundo. Ramp to the channel floor south of 120th, and back up to the north side west of Crenshaw. Continue to 116th St., and transition there to city streets.

The channel along 136th St. would act as a lead-in strip to the main trail. Riders would cross at grade over the intersecting streets, and very little improvement would be needed except a bridge across the Dominguez channel to the main trail.

A rest area would be located south of Main St., where there is a good view of the Goodyear Blimp landing area. Alondra Park would also be used as a rest stop.

<i>Costs</i>		
Asphalt paving	2,540'	\$ 38,000
Resurfacing	8,400'	27,000
Concrete paving 3"	13,440'	289,000
Concrete paving 6"	800'	20,000
Ramps under crossings (trap. chan.)	8 (2 short)	685,000
Ramps to chan. floor (vert. chan.)	11	731,500
Tunnels (open-cut)	4	833,500
Landscaping	12 locations	158,000
Fencing	17,000'	72,500
Rest area	1	192,000
Bridge at 135th St.	80'	34,500
Low-flow crossing	1	<u>5,500</u>
Subtotal		\$3,064,500
x 21%		<u>643,500</u>
Total		\$3,708,000

Regional parks within 2 miles	0
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	2
Secondary schools within 1 mile	8
Shopping centers and business districts within 2 miles	3
Jurisdictions: Carson, Los Angeles City, Gardena, Torrance, Los Angeles County, Hawthorne, Inglewood	

¹The project length includes 1.8 miles along the 135th Street channel, which would act as an extension of the main trail

(Table 4-19 Continued)

PROJECT TOTALS

Total Cost: \$4,492,500

Regional parks within 2 miles	0
Neighborhood parks adjacent	2
Colleges and universities within 2 miles	2
Secondary schools within 1 mile	8
Shopping centers and business districts within 2 miles	3

LIMEKILN CREEK EQUESTRIAN TRAIL

Aliso Creek is recommended as the primary route for a connection through this area from the proposed Los Angeles River equestrian trail to the existing Twelfth District (City of Los Angeles) trail system. A trail along Limekiln, however, would provide an alternative route for riders, and would create an 11.3-mile trail loop through an area of the San Fernando Valley where there is heavy equestrian activity.

A bicycle trail is not recommended along Limekiln because one side of the channel has only marginal suitability for trail development and an equestrian trail would be a priority in this area.

LOPEZ CANYON BICYCLE TRAIL

A bicycle trail along the Lopez Canyon channel would provide a lead-in path to the Hansen Dam Recreation area. It would also extend the regional trail system from the proposed Tujunga Wash trail north to the San Gabriel foothills.

The channel ROW would provide a good trail route except for a major obstruction being created by construction of the Foothill Freeway. It would be necessary to use city streets to detour around this obstruction.

An equestrian trail is not recommended for this channel because there are no existing trails in the base of Lopez Canyon to which it could connect. Riders presently use the Little Tujunga Canyon wash to gain access from the Hansen Dam area to San Gabriel Mountain trails.

TABLE 4-20. LIMEKILN CREEK EQUESTRIAN TRAIL (2.8 MILES)

Route Bridge from the proposed trail on the east side of Aliso Creek to the south side of Limekiln. Cross Tamps and Corbin at grade, changing to the north side of the channel at Corbin. Tunnel under Plummer and cross Corbin at grade north of Plummer. Tunnel under Lassen and Devonshire, and continue north to the Limekiln Debris Basin.

<i>Costs:</i>		
Tunnels	3	\$ 556,500
Bridge	20'	9,000
Fencing	13,000'	55,500
Landscaping	8 locations	104,000
Subtotal		\$ 725,000
x 21%		152,500
Total		\$ 877,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	3	
Shopping centers and business districts within 2 miles	0	
<i>Jurisdictions: Los Angeles City</i>		

TABLE 4-21. LOPEZ CANYON BICYCLE TRAIL (1.4 MILES[†])

Route From the Hansen Dam Recreation Area, tunnel under Foothill Blvd. on the west side of the channel. Cross Terra Bella at grade. Continue north to the Foothill Freeway, and follow the freeway ROW to the cul-de-sac at Pierce. Travel south on Pierce, north of Foothill, and east on Van Nuys, crossing under the freeway and reentering the channel ROW on the east side. Cross Fillmore at grade, and transition to surface streets at Paxton.

<i>Costs:</i>		
Asphalt paving	15,500'	\$ 232,500
Tunnels	1	185,500
Fencing	15,500'	66,000
Landscaping	6	78,000
Rest area	1	44,500
Subtotal		\$ 606,500
x 21%		127,500
Total		\$ 734,000
Regional parks within 2 miles	3	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	1	
Shopping centers and business districts within 2 miles	1	
<i>Jurisdictions: Los Angeles City and County</i>		

[†]This distance includes 0.4 mile of on street trail

PACOIMA WASH BICYCLE TRAIL

A bicycle trail along the Pacoima Wash would provide increased access to the regional trail system from a heavily populated part of the San Fernando Valley. It would also create a recreational trail connection between the proposed Tujunga Wash trail and the Lopez Flood Control Basin, a potential recreation area. It would provide a local bicycle transportation route for residential areas along the channel.

The ROW is suitable for only one trail, since much of the southwestern side has little or no available space south of Van Nuys Boulevard. A bicycle trail is recommended rather than an equestrian trail because the channel would not provide access to any major equestrian facilities or trails.

The trapezoidal section of the channel would facilitate trail development, but the ROW is obstructed at frequent intervals by streets. Numerous at-grade crossings or ramps would be required.

SANTA ANITA WASH BICYCLE TRAIL

A bicycle trail along the Santa Anita Wash would extend the regional trail system from the Rio Hondo backbone trail north through Arcadia to the San Gabriel foothills. The trail would improve bicycle access to the Peck Road Park, the Whittier Narrows, and the Arcadia Wilderness Park. It would also provide a transportation route for local residents.

The equestrian trail lies on the west side of the channel west of the channel access road. The bicycle trail would also be on this side of the channel, but the two would be separated by the existing fence. It would be necessary for the equestrian trail to cross the bicycle path in several places.

There is an existing equestrian trail along the entire length of the channel south of Sycamore Street.

The Los Angeles County Road Department has published a preliminary study of the feasibility of use of the channel right of way for a bicycle trail (Ref 4-12).

TABLE 4-22. PACOIMA WASH BICYCLE TRAIL (6.1 MILES¹)

Route: Bridge from the proposed Tujunga Wash trail to the northeast side of the Pacoima Wash. Cross Wentworth, Branford, Montague, and Wenjo at grade. Ramp under Osborne, cross Terra Bella at grade, and ramp under Van Nuys. Bridge to the west side, ramp under Devonshire, and cross Paxton at grade. Bridge back over the channel to the east side, cross under the Golden State Freeway (no ramp necessary) and tunnel under Laurel Canyon. North of Laurel Canyon continue along the freeway ROW south of the Simi/San Fernando Freeway to Haddon Ave. and cross under freeway at the existing tunnel there. Continue on the east side of the channel and ramp under San Fernando and the S.P.R.R. Cross 4th St. and 5th St. at grade. Ramp under Glenoaks and Foothill, and continue under the Foothill Freeway (no ramp necessary). Fifteen feet of easement must be secured from the storage yard between Foothill Blvd. and Foothill Freeway. This area is not presently used. Transition to surface streets at Fenton Ave.

<i>Costs</i>		
Asphalt paving	17,500'	\$ 262,500
Resurface existing paving	14,000'	45,000
Tunnel	1	185,500
Ramps	7	623,000
Bridges	3	112,000
Fencing	2,300'	10,000
Landscaping	22	286,000
Rest areas	1	44,500
Subtotal		\$1,568,500
x 21%		329,500
Total		\$1,898,000
Regional parks within 2 miles	4	
Neighborhood parks adjacent	2	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	7	
Shopping centers and business districts within 2 miles	1	
Jurisdictions: Los Angeles City, San Fernando		

¹Includes 0.6 mile of on street trail

TABLE 4-23. SANTA ANITA WASH BICYCLE TRAIL (4.9 MILES)

Route: From the Rio Hondo bicycle trail on the north side of the Peck Reservoir, bridge across the Santa Anita channel to the west side. Travel north on the west side, tunneling under Live Oak west of the existing equestrian tunnel. Cross Longden and Camino Real at grade. Tunnel under Duarte west of the existing equestrian tunnel. Cross Huntington and 5th Ave. at grade, using existing signals, and reenter the channel ROW on the east side. Cross Santa Clara at grade. Cross under the Foothill Freeway (no obstruction) to 2nd St. Cross 2nd and Colorado at grade using the existing signals, and continue north from Colorado on the west side of the channel. Cross under Foothill Blvd. (no obstruction), and cross to the east side on the existing bridge. Cross Sycamore at grade, and transition to city streets at Elkin, or continue along the east side of the debris basin (a 1/4-mile extension past the debris basin would connect the trail to Wilderness Park).

<i>Costs</i>		
Asphalt paving	23,760'	\$ 356,500
Tunnels (open-cut)	2	370,500
Fencing	24,360'	107,000
Rest areas	2	89,500
Landscaping	4 locations	52,000
Subtotal		\$ 975,500
x 21%		205,000
Total		\$1,180,500
Regional parks within 2 miles	2	
Neighborhood parks adjacent	2	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	6	
Shopping centers and business districts within 2 miles	1	
Jurisdictions: Arcadia, Monrovia		

SAWPIT WASH BICYCLE AND EQUESTRIAN TRAILS

The southern end of the Sawpit Wash below the Buena Vista channel is recommended as part of a Class B project that would connect the existing backbone trails along the Rio Hondo and San Gabriel Rivers.

Trails along Sawpit north of the Buena Vista confluence would extend the regional trail system from the Rio Hondo backbone to the San Gabriel foothills. These trails would provide improved access to the backbone system, to the Whittier Narrows Recreation Area, and, via the proposed Buena Vista connector, to the Santa Fe Dam Recreation Area.

The bicycle trail would also provide a transportation route for local residents that would improve bicycle access to neighborhood parks, shops, and businesses along the channel ROW. The equestrian trail would link a concentration of equestrians in Monrovia and Bradbury to the Rio Hondo and Whittier Narrows equestrian facilities. It would also provide the possibility for a trail loop to the Santa Anita channel and San Gabriel Mountain trails.

The channel ROW is generally satisfactory for trail development except for two major obstructions. The channel is covered for 600 feet south of Central Avenue by a building, the 210 Freeway, and two streets. At the Royal Oaks/Mountain intersection, the channel is covered for about 230 feet. Bicyclists would detour around these obstructions using city streets. Equestrians would use lightly traveled city streets from Duarte to Central, and the channel floor under the Royal Oaks/Mountain intersection.

The Los Angeles County Road Department has published a preliminary study of the feasibility of use of the channel ROW for a bicycle trail (Ref 4-13).

TABLE 4.24a. SAWPIT WASH BICYCLE TRAIL (4.6 MILES¹)

Route: From the proposed Sawpit/Buena Vista trail on the east side of Sawpit, cross the existing footbridge to the west side prior to the Buena Vista confluence. Cross Shrode and Euclid at grade. Follow Euclid east and Mountain Ave. north to Royal Oaks. Reenter the channel ROW on the east side north of Royal Oaks. Cross Lemon, Wild Rose, and Graystone at grade. At Norumbega Dr. transition to surface streets, traveling east to Norumbega Rd. and north on Norumbega Rd. to the flood control service road. Continue on this road to Monrovia Canyon Park.

<i>Costs</i>		
Asphalt paving	19,800'	\$ 297,000
Fencing	19,800'	84,000
Landscaping	11 locations	143,000
Rest area	1	44,500
Subtotal		\$ 568,500
x 21%		119,500
Total		\$ 688,000
Regional parks within 2 miles	1	
Neighborhood parks adjacent	3	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	4	
Shopping centers and business districts within 2 miles	0	
Jurisdictions: Arcadia, Irwindale, Monrovia, Los Angeles County		

¹The 4.6 mile total length includes 3.2 miles on city streets and 1.0 mile on Flood Control District service road.

TABLE 4.24b. SAWPIT WASH EQUESTRIAN TRAIL (4.6 MILES¹)

Route: From the proposed Sawpit/Buena Vista trail on the south side of Buena Vista, bridge across the Buena Vista channel to the east side of Sawpit. Cross Shrode and Euclid at grade. Tunnel under Duarte.² Cross the railroad bridge on the north side of Duarte to the west, and continue along the rail ROW to Shamrock. Travel north along Shamrock under the freeway to Central. Follow the dirt strip on the north side of Central to the channel, reentering the ROW on the east side. Tunnel under Huntington.² Ramp to the channel floor south of the Royal Oaks/Mountain intersection, and back up to the west side north of the point where the adjacent parking lot obstructs the west access road. Cross Lemon, Wild Rose, Graystone, and Norumbega Dr. at grade, crossing to the east side of the channel at Norumbega Dr. Travel north to Norumbega Rd., and follow Norumbega Rd. to Monrovia Canyon Park.

<i>Costs</i>		
Bridge	20'	\$ 9,000
Underpasses ²	2	266,000
Ramps to chan. floor (vert. chan.)	2	133,000
Concrete paving 6"	850'	28,500
Fencing	22,000'	93,500
Landscaping	10 locations	130,000
Rest area	1	44,500
Subtotal		\$ 704,500
x 21%		148,000
Total		\$ 852,500

¹The 4.6 mile total length includes 3.1 miles on city streets, 0.4 mile on the channel floor, and 1.1 mile on Flood Control District service road.

²Both structures are under bridges that appear to be self-supporting across the entire ROW width. Culverts would therefore probably not be required which would reduce the cost of the underpasses.

WALNUT, BIG DALTON/SAN DIMAS BICYCLE TRAIL

This trail would extend the regional trail system through one of the more heavily populated parts of the eastern San Gabriel Valley. It would provide residents of this area with improved bicycle access to the regional backbone system, Whittier Narrows, the southern coastline, the San Gabriel Mountains, and to several smaller regional parks, including San Dimas Canyon Park and Marshall Canyon Park. It would also provide a transportation route to businesses, shops, and industries in the area, and to a number of secondary schools.

Despite these benefits, the trail would have significant drawbacks. A connection to the San Gabriel River trail would require a long bridge, since there are no street crossings in the vicinity of the Walnut Creek/San Gabriel confluence that would be good for bicycle use. Also, there are numerous obstructions along the route, including two freeways. Two detours on city streets and a large number of tunnels and at-grade crossings would be required.

There are a large number of equestrians along the northern part of this route. An equestrian trail is not recommended, however, because of the frequent at-grade crossings or tunnels that would be required, and because other existing and proposed trails appear to satisfy regional needs better than this route would. The San Gabriel River trail, Skyline/Marshall Creek trails and the proposed San Jose/Thompson Creek trails all provide access from the regional backbone to the San Gabriel Mountains through the San Gabriel Valley.

TABLE 4-25. WALNUT/BIG DALTON/SAN DIMAS BICYCLE TRAIL (13.9 MILES¹)

Route From the bicycle trail on the west side of the San Gabriel River, bridge across the San Gabriel to the north side of Walnut Creek. Pass under the San Gabriel River Freeway (no obstruction). Tunnel under Baldwin Park. Cross the SPT railroad, Vineland, and Francisquito at grade. Travel northwest on Francisquito under the San Bernardino Freeway, then east on Garvey to the Big Dalton channel. Enter the channel on the north side. Cross Merced and Pacific at grade. Tunnel under Badillo, and cross Puente at grade. Tunnel under Ramona, and cross the SPT railroad and Los Angeles at grade. Tunnel under Azusa Canyon.

Cross the railroad and Cypress at grade and tunnel under Irwindale. Cross to the south side of the channel on the existing foot-bridge and continue north, crossing Vincent at grade. Follow the south side of the San Dimas Wash to Lark Ellen. Cross Lark Ellen at grade, and cross the channel over the Lark Ellen bridge to the north side of San Dimas Wash. Tunnel under Azusa and cross Conwell and Hollenbeck at grade. Tunnel under Citrus, Barranca, Arrow, and Grand. Cross Glendora, Juanita, Bonnie Cove, Gladstone, and Sunflower at grade, crossing to the south side of the channel at Gladstone. Cross under the railroad (no obstruction), and tunnel under Lone Hill. Leave the channel right-of-way at the southbound lane of the 210 Freeway and follow the freeway to Allen Street. Turn left on Allen, cross under the 210 Freeway, turn left on Amelia, cross under the 30 Freeway, and reenter the San Dimas Wash right-of-way on the north side of the channel. Cross Cataract, San Dimas, and Foothill at grade. Continue east to the end of the channel, then along the north edge of the spreading grounds to San Dimas Canyon Park.

<i>Costs</i>		
Asphalt paving	66,000'	\$ 990,000
Tunnels (open-cut)	11	2,292,000
Bridge (San Gabriel River)	430'	430,000
Fencing	66,000'	290,500
Landscaping	15 locations	195,000
Rest areas	2	89,500
Subtotal		\$4,277,000
x 21%		898,000
Total		\$5,175,000

Regional parks within 2 miles	5
Neighborhood parks adjacent	4
Colleges and universities within 2 miles	2
Secondary schools within 1 mile	18
Shopping centers and business districts within 2 miles	4
Jurisdictions: Baldwin Park, West Covina, Irwindale, Covina, Glendora, San Dimas, Los Angeles County	

¹The 13.9 mile length of the trail includes one mile on city streets

WALNUT CREEK (EAST OF BIG DALTON) BICYCLE TRAIL AND EQUESTRIAN UNDERPASS

The proposed Walnut Creek/Big Dalton/San Dimas bicycle trail is recommended as the primary extension of the regional system into the area of the San Gabriel Valley between the San Gabriel River and San Jose Creek. However, a trail along Walnut Creek east of the Big Dalton confluence would further expand the area served by the system. The Walnut Creek bicycle trail would improve access from the middle San Gabriel Valley to the backbone trail system, the Whittier Narrows Recreation Area, the Puddingstone Recreation Area, and to local parks along the channel. It would also provide a transportation route to schools, businesses, and shops, including two regional shopping centers.

The channel is covered for about 2,000 feet by a shopping center parking lot in West Covina and the ROW is obstructed in many places by street crossings. These crossings include the San Bernardino Freeway and three intersections.

There is an existing equestrian trail along the eastern end of the channel from Citrus Avenue to the Walnut Creek Park. This trail links an area of equestrian activity around Cortez Park to equestrian facilities in Walnut Creek Park, including a riding club and a trail which leads to Puddingstone Park.

The San Bernardino Freeway is presently a major obstruction on this trail. Riders must leave the channel ROW to travel on city streets through the Grand Avenue on Holt Avenue underpasses. Since traffic on these streets is fairly heavy, riders frequently trailer their horses between the two areas. An undercrossing on the channel floor under the freeway would greatly improve the usefulness of the existing trail. The cost of the undercrossing, including two ramps to the channel floor and 150 feet of 6-inch concrete paving, would be about \$167,000. Such an undercrossing might also be useful for the Skyline Trail. Current plans for that route include use of the Holt Avenue underpass.

An equestrian trail is not recommended between the Big Dalton confluence and Citrus Avenue because of the frequent obstructions along the channel ROW. When completed, the Skyline Trail will link the existing equestrian trail on Walnut Creek to the San Gabriel River backbone trail.

TABLE 4-26. WALNUT CREEK BICYCLE TRAIL (6.5 MILES¹)

Route: From the proposed Walnut/Big Dalton/San Dimas trail, cross Francquito at grade, reentering the Walnut Creek ROW on the south side of the channel. Cross Big Dalton Ave. at grade, and tunnel under Puente. Cross Willow at grade. Cross Merced and Orange at the existing intersection. Tunnel under Cameron and Sunset, and cross Service at grade. Follow the West Covina Parkway on-street from Service to California. East of California reenter the channel ROW on the south side. Tunnel under Vincent and cross Valinda at grade. Tunnel under Lark Ellen, Azusa, Hollenbeck, and Citrus, and cross Barranca at grade. Travel north on Barranca to cross under the San Bernardino Freeway, then east on Garvey. Reenter the channel ROW on the north side. Travel 1500 feet north, and bridge to the south side. Tunnel under Grand, and cross Oak Canyon and Covina Hills at grade. At Covina Hills, transition to surface streets.

<i>Costs:</i>		
Asphalt paving	21,900'	
Tunnels (open-cut)	9	\$1,666,000
Bridge	15'	7,000
Fencing	29,900'	126,500
Landscaping	10 locations	130,000
Rest areas	1	44,500
Subtotal		\$1,974,000
x 21%		415,000
Total		\$2,391,000
Regional parks within 2 miles	1	
Neighborhood parks adjacent	3	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	8	
Shopping centers and business districts within 2 miles	2	
Jurisdictions: Baldwin Park, West Covina, Covina, Los Angeles County		

¹ The 6.5-mile total length includes 0.8 mile of on-street trail.

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CLASS D PROJECTS

- Arcadia Wash (South End) Bicycle Trail
- Centinela Creek Bicycle Trail
- Coyote Creek (North End) Bicycle Trail

ARCADIA WASH (SOUTH END) BICYCLE TRAIL

The Arcadia Wash from the Rio Hondo confluence to Las Tunas Dr. would provide a lead-in trail to the regional backbone. The channel ROW would provide a link from the commercial area around Las Tunas Dr. and residential areas in Temple City to the regional trail system. Beyond Las Tunas Dr., frequent obstructions would make extending the trail impractical.

Due to its short length and termination in a commercial area, an equestrian trail is not recommended.

CENTINELA CREEK BICYCLE TRAIL

A bicycle trail along Centinela Creek would provide a lead-in route to the Ballona Creek bicycle trail. It would improve access to the beach and to the South Bay bicycle trail from adjacent residential areas and would also provide a local bicycle transportation route to shops, businesses, and industries in the area.

The route is obstructed by a number of major streets crossings as well as the San Diego Freeway. The channel is covered for a distance of about 850 feet between the San Diego Freeway and Sepulveda Boulevard.

An abandoned railroad ROW from which the rails have been removed parallels the channel from Centinela to La Cienega. Because of the railroad underpasses, the rail ROW is preferable to the channel access road for bicycle use.

The Los Angeles County Road Department has made a preliminary study of the feasibility of a bicycle path along Centinela Creek. The route proposed by the Road Department is described in Table 4-28.

COYOTE CREEK (NORTH END) BICYCLE TRAIL

While the Coyote Creek/North Fork route is recommended as the primary regional trail in this area, a bicycle trail along Coyote Creek from the North Fork confluence to the end of the channel would extend the regional system further by providing access from populous areas of La Mirada and Buena Park. This trail would improve bicycle access to the coast and to the San Gabriel River bicycle trail. It would also provide a transportation route for workers in the industrial areas along the channel.

TABLE 4-27. ARCADIA WASH (SOUTH END) BICYCLE TRAIL (1.2 MILES)

Route: At the Rio Hondo confluence bridge from the east side of the Rio Hondo to the west side of Arcadia Wash. Tunnel under Lower Azusa and cross Grand, Freer, Daines, Live Oak, and Las Tunas at grade.

<i>Costs</i>		
Asphalt Paving	6,600'	\$ 99,000
Tunnel (open cut)	140'	185,500
Bridge	1	98,000
Fencing	6,600'	28,000
Landscaping	8	104,000
Rest Area	1	44,500
Subtotal		\$559,000
x 21%		117,500
Total		\$676,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	2	
Shopping centers and business districts within 2 miles	1	
Jurisdictions: El Monte, Temple City, Arcadia		

TABLE 4-28. CENTINELA CREEK BICYCLE TRAIL (1.4 MILES¹)

Route: From the bicycle trail along the north side of Ballona, cross to the south side of Centinela east of the confluence, over the existing abandoned railroad bridges. Follow the south side of the channel to the east. Bridge across the inlet west of Centinela Ave., and tunnel under Centinela and Inglewood. Transition to surface streets at Meamer, and continue on surface streets and railroad ROW.

<i>Costs</i>		
Bridge improvements	2 bridges	\$ 50,000
Bridge	15'	6,500
Tunnels (open cut)	2	417,000
Resurfacing	3,000'	9,500
Fencing	5,600'	24,000
Landscaping	21 locations	20,000
Subtotal		\$533,000
x 21%		112,000
Total		\$645,000
Regional parks within 2 miles	1	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	0	
Shopping centers and business districts within 2 miles	2	
Jurisdiction: Los Angeles City		

¹ Includes 0.1 mile of railroad ROW

TABLE 4-29. COYOTE CREEK (NORTH END) BICYCLE TRAIL (3.8 MILES)

Route: From the proposed Coyote Creek/North Fork bicycle trail, bridge over the North Fork Channel, and continue on the north side of Coyote Creek. Ramp under Valley View, then tunnel under Artesia, the SPTC railroad, Firestone and the Santa Ana Fwy. (together), Trojan Way, and Knott. Cross Western at grade, tunnel beneath the AT&SF railroad, Stage Rd., and La Mirada. Ramp under Rosecrans and continue north, leaving the channel ROW at Keating Drive for access to Bahringer Park.

Costs:		
Resurfacing	8,400'	\$ 27,000
Asphalt paving	13,300'	199,500
Ramps (trap. chan.)	2	178,000
Tunnels (open cut)	8	1,668,000
Bridge	+80'	48,000
Landscaping	2 locations	28,000
Subtotal		\$2,144,500
x 21%		450,000
Total		\$2,594,500
Regional parks within 2 miles	0	
Neighborhood parks adjacent	2	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	0	
Shopping centers and business districts within 2 miles	0	
Jurisdictions: Cerritos, Buena Park, La Mirada, Orange County		

TABLE 4-30. EMERALD WASH BICYCLE TRAIL (1.4 MILES)

Route: From the connection with the proposed Live Oak Wash trail Payton, cross 12th St. at grade, tunnel under Foothill Blvd., and cross Emerald and Baseline at grade. Continue north to Raymond Drive or to the debris basin.

Costs:		
Asphalt paving	7,900'	\$118,500
Tunnel (open cut)	1	185,500
Fencing	7,900'	33,500
Landscaping	5	66,000
Subtotal		\$402,500
x 21%		84,500
Total		\$487,000
Regional parks within 2 miles	2	
Neighborhood parks adjacent	0	
Colleges and universities within 2 miles	1	
Secondary school, within 1 mile	2	
Shopping centers and business districts within 2 miles	0	
Jurisdiction: LaVerne		

CLASS E PROJECTS

- Emerald Wash, Live Oak Wash, and Marshall Creek Bicycle Trails
- Los Cerritos Bicycle Trail
- Verdugo Wash (Upper End) Bicycle and Equestrian Trails

EMERALD WASH, LIVE OAK WASH, AND MARSHALL CREEK BICYCLE TRAILS

The three short channels lead north from the Puddingstone Recreation Area to the San Gabriel foothills. Trails along the lower ends of Marshall and Live Oak channels would provide lead-in routes for bicyclists from downtown and residential areas in LaVerne to Puddingstone. Trails along the upper ends of Emerald and Live Oak would provide routes from residential areas to the central LaVerne area and to LaVerne College. They would also allow access from residential areas to the foothill canyons and to local schools and parks.

Live Oak and Thompson Creek are separated by only about a half-mile along the upper portion of Live Oak Wash. A connection on city streets between the two would provide an improved bicycle route to Puddingstone from the Claremont area.

Because all three channels have segments that are unusable or that can be entered only along one side, none could provide more than two miles of continuous trail.

There is an existing equestrian trail along Marshall Creek from Puddingstone to Marshall Canyon Park. Equestrian trails are not recommended on Emerald Wash and Live Oak Wash because of gaps which would require the use of city streets and because Marshall Creek and the proposed Thompson Creek trail would provide routes through the area.

LOS CERRITOS BICYCLE TRAIL

The Los Cerritos Channel was not surveyed as part of this study, and no recommendations are made here as to its use. The City of Long Beach, however, has planned a bicycle route along the channel as part of its city bike route system (Ref. 4-14). The proposed trail would follow the northeast side of the channel from Clark Avenue to approximately 7th Street.

VERDUGO WASH (UPPER END) BICYCLE AND EQUESTRIAN TRAILS

An equestrian trail has been proposed along the Verdugo Wash from the Verdugo Basin to approximately Boston Street. This trail would form part of the proposed Rim-of-the-Valley trail system (see page). It would provide a major part of the linkage between trails in the Devil's Gate Reservoir area and those in the La Tuna Canyon/Sunland area.

A bicycle trail along this same portion of the channel would create lead-in paths to Crescenta Valley Park (at Dunsmore) and a pleasant recreational trail along the Verdugo Mountains.

TABLE 4-31. LIVE OAK WASH BICYCLE TRAIL (3.9 MILES¹)

Route: Follow the west side of the channel from Puddingstone Reservoir, and tunnel under Puddingstone Drive. Cross Park, the SPT RR, and Walnut at grade. Take B St. north from this point to Payton Rd. Follow Payton east to D St., then re-enter the channel ROW on the west side. Tunnel under Foothill Blvd. Cross Bradford, Amhe. st, Bowdoin, and Williams at grade. Transition to surface streets at Williams or continue to the debris basin.

<i>Costs:</i>		
Asphalt Paving	9,200'	\$138,000
Tunnels (open cut)	2	370,500
Fencing	13,200'	56,000
Landscaping	10	130,000
Rest areas	1	44,500
Subtotal		\$739,000
x 21%		155,000
Total		\$894,000
Regional parks within 2 miles	2	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	2	
Shopping centers and business districts within 2 miles	0	
Jurisdictions: San Dimas, LaVerne, Claremont, Los Angeles County		

¹ The 3.9 mile total distance includes 0.8 mile of on street trail

TABLE 4-32. MARSHALL CREEK BICYCLE TRAIL (0.9 MILES)

Route: Follow the west side of the channel from Puddingstone Reservoir, tunneling under Puddingstone Dr. Cross the SPT RR at grade and tunnel under Arrow. Continue north and east to Wheeler and transition to city streets at Wheeler.

<i>Costs:</i>		
Asphalt paving	4,760'	\$ 71,500
Tunnels (open-cut)	2	408,000
Fencing	4,760'	20,000
Landscaping	4 locations	62,000
Subtotal		\$562,500
x 21%		118,000
Total		\$680,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	1	
Secondary schools within 1 mile	0	
Shopping centers and business districts within 2 miles	0	
Jurisdictions: San Dimas, LaVerne		

TABLE 4-33a. VERDUGO WASH BICYCLE TRAIL (2.1 MILES)

Route: From the Verdugo Debris Basin, enter the Verdugo Wash on the Channel floor and ramp up to the west side on the existing access ramp. Cross Whiting Woods at grade, changing to the east side of the channel. Bridge across the Eagle Channel inlet, and cross New York at grade. Bridge across the Dunsmore Canyon inlet, cross Dunsmore Ave. at grade, and bridge across the access ramp west of Dunsmore Ave. Transition to city streets at Boston.

<i>Costs:</i>		
Asphalt paving	3,300'	\$ 49,500
Resurfacing	1,150'	3,500
Bridges	3 (20' ea.)	27,000
Fencing	10,000'	42,500
Landscaping	2 locations	26,000
Subtotal		\$148,500
x 21%		31,000
Total		\$179,500
Regional parks within 2 miles	1	
Neighborhood parks adjacent	1	
Colleges and universities within 2 miles	0	
Secondary schools within 1 mile	0	
Shopping centers and business districts within 2 miles	3	
Jurisdiction: Glendale		

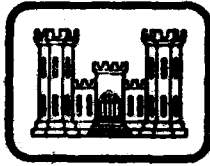
TABLE 4-33b. VERDUGO WASH EQUESTRIAN TRAIL (2.1 MILES)

Route: From the Verdugo Debris Basin, enter the Verdugo Wash on the channel floor and ramp up to the east side. Cross Whiting Woods at grade, changing to the west side of the channel. Cross New York and Dunsmore Ave. at grade. Bridge to the north side of the channel just east of Boston. Leave the channel ROW at Boston and travel through the Honolulu Ave. underpass to connect to trails along La Tuna Canyon Rd. north of the Foothill Fwy.

<i>Costs:</i>		
Ramp to floor (vert. chan.)	1	\$ 66,500
Removal of asphalt	1,500'	11,500
Bridge	35'	20,000
Fencing	12,000'	51,000
Landscaping	2 locations	26,000
Subtotal		\$175,000
x 21%		37,000
Total		\$212,000

CHAPTER 4: REFERENCES

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Chapter 5.

Potential Non-Trail Projects

CHAPTER 5

POTENTIAL NON-TRAIL PROJECTS

The great potential for recreational use of the LACDA system is evident from the heavy use it now receives. This use occurs mostly in illegal and largely unpreventable ways, despite the presence of fences and warning signs and the relative lack of aesthetic and physical improvements toward encouraging use. The vast amounts of open space within the system act as a lure for children, who frequently are seen netting fish in the channels, improvising bicycle motocross courses along access roads, and wading in low-flow streams. Access roads often are used as neighborhood pathways by children and joggers, and motorcycles and mopeds are commonly seen in the channels.

Ideas for non-trail recreational uses of the LACDA system are discussed in this chapter, with indications as to where they might best be implemented. No attempt has been made to identify all possible project locations; the great size of the system prevented such a detailed analysis within the scope of this study, particularly with regard to possible uses of the many debris basins and foothill channels. The intent has been to identify the most feasible locations for prototypical projects in order to demonstrate the concepts described. Good demonstrations of the potential of these concepts should encourage proposals from local agencies most familiar with possible sites for their implementation.

The following concepts are discussed in this chapter.

- Linear Parks and Green Space for Urban Neighborhoods
 - Walking and jogging paths
 - Small picnic areas
 - Play areas for children
 - Commercial facilities adjacent to linear parkways
 - Exercise courses and jogging paths
 - Neighborhood gardens
 - Murals
- Potential Projects for Nonlinear Parks
 - Natural riparian areas
 - Artificial streambeds

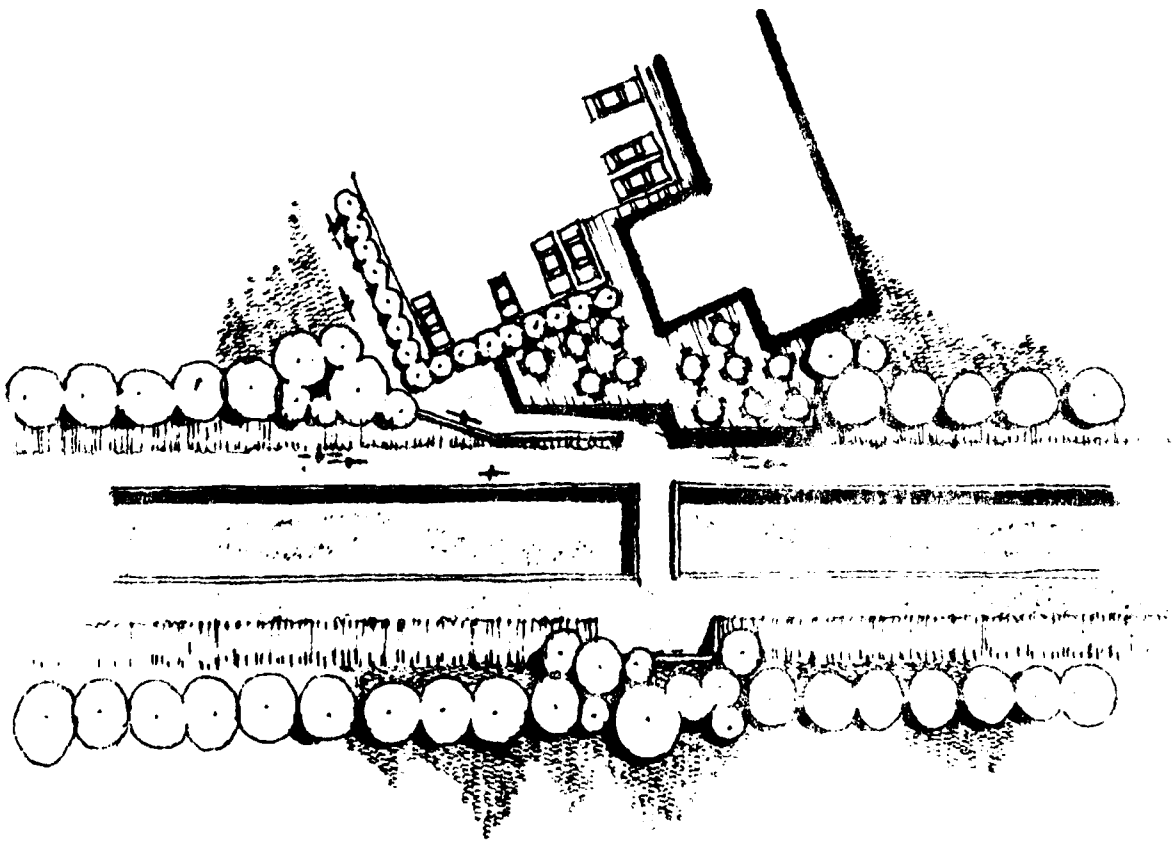
- Lakes and ponds
- Use of dams in channels
- Lead-in strips
- Parks in debris basins

- Nature Study and Wildlife Conservation
- Transportation Projects
 - Nonrecreational transportation projects
 - Trams or mini-buses for transportation to parks
- Skating and Skateboarding
- Hostels and Campgrounds
- Use of the Channel Floor for Court Games
- Motorcycle Use and Bicycle Motocross Courses
- Air Rights

LINEAR PARKS AND GREEN SPACE FOR URBAN NEIGHBORHOODS

The Los Angeles metropolitan area contains many densely populated residential neighborhoods, which often have very little usable open space. Landscaping of yards and around apartment buildings is discontinuous and usually decorative in nature; it seldom provides spaces that lend themselves to active or passive recreational uses. This is particularly true of areas with a large number of apartment buildings. If the local neighborhood park is more than a few blocks away, the only place available for a leisurely walk may be sidewalks along busy streets or through commercial districts.

Many of the flood channels in the LACDA system pass through residential areas and have ample space within their rights-of-way for linear parks that would serve as additions to the neighborhood park system. Such linear strips would be relatively narrow for most of their length (15 to 30 feet on each side of the channel) and would provide paths for walking and jogging. There are occasional wide spaces along the channel rights-of-way, usually near street crossings, that are large enough for



Commercial facilities such as those illustrated here might be provided for trail or linear park users in places where shop-

ping centers or commercial strips lie adjacent to flood channels.

shaded, grassy areas. These might be provided with a picnic table or bench and a water fountain, or simply a shaded slope that would be inviting to a reader.

Linear parks would also provide excellent instructional play areas for neighborhood children, particularly in densely populated areas where vacant lots and other traditionally used open spaces are rapidly disappearing. The channel rights-of-way already are used extensively by children for this purpose. Since they are separated from traffic, they provide safe play areas.

Linear parks would provide aesthetic benefits to the adjacent communities through the addition of green space and vertical landscape form. Tall trees such as eucalyptuses, sycamores, and pines would relieve the visual monotony of wide expanses of apartment buildings and would contribute to the definition of adjacent neighborhood spaces.

Such green strips need not be elaborate. For most of their length, they would contain only a path and shrubs or trees, with an occasional bench or water fountain. Wide spots along the right-of-way would be given somewhat more elaborate treatment, and a few specially-selected areas would be developed as mini-parks. Lawn areas, murals on the channel walls or on bridge structures, attractive paving, and perhaps cantilevered sections extending over part of the flood channel to increase the available space — all could be features of these mini-parks. Special facilities such as exercise courses, skating rinks, bicycle paths, equestrian trails, and neighborhood gardens would be provided in appropriate locations.

The plan from *Los Angeles River Prototype Park*, prepared by the U.S. Army Corps of Engineers for the Griffith Park area (Ref 5-1), is an example of a mini-park development that could be applied to locations selected for more elaborate treatment.

Commercial Facilities Adjacent to Linear Parkways

Whenever possible, linear parks would be located to provide walkways from residential areas to neighborhood stores or shopping centers. In places where commercial facilities are located adjacent to the flood channel, owners might cooperate in the development of the paths by providing entrances from the linear park to their businesses. Patios, seating areas, or outdoor cafe facilities for walkway or trail users might also be provided.

While this concept is promising in theory, few locations were found during the channel survey that seemed to offer much potential for this type of development. (See subsection on possible locations further in this chapter.) The areas in back of stores and shopping centers seldom have much potential for aesthetic improvement. The spaces between stores and channels are usually used as alleys or for truck deliveries, refuse bins, parking, or for other essential functions that would conflict with commercial or recreational uses. Appropriate combinations of suitable rear commercial spaces and channels with potential for trail or walkway development are rare.

Exercise Courses and Jogging Paths

Exercise courses, or "Vita Courses," such as the Thompson Creek course in Claremont, could be developed along with jogging paths. These facilities would be in keeping with the trend toward better physical fitness and would be especially useful to apartment dwellers with limited exercise space. The jogging paths would provide safer routes for running than commonly used city streets.

Neighborhood Gardens

The space available for vegetable gardens in urban areas is usually quite limited. The success of public gardens such as the one at Wattles Park in Los Angeles indicates a need for such areas. Locations suitable for gardening might be limited, since good soils would be required. The soils along many flood channels are heavily disturbed and compacted, and considerable amendment would be required in many places to make them usable.

Murals

Although channel walls would provide good surfaces for murals, they generally cannot be seen well from outside the channel right-of-way. The most common views of the walls are from streets that cross the channel, and these would be poor locations for viewing murals. Therefore, murals generally would be practical only when used in conjunction with other activities planned for the channel right-of-way, such as linear parks or bicycle paths. In places where such activities will occur, murals on the channel walls would do much to relieve the potentially negative visual impact of the channels.

Murals at neighborhood facilities such as linear parks might be done by classes from local schools or by local groups. Such neighborhood participation would encourage a sense of local identity with the project and would serve as a source of neighborhood pride. These factors might help to discourage vandalism. Guidelines and artistic advisors might be provided to help local groups with mural projects.

At regional facilities such as large parks, heavily used sections of regional trail, or hostels, murals should be of high quality in keeping with both the standards of the regional facilities and of well-known street art in the Los Angeles area (Ref 5-2). Sources of talent for mural projects might include the Performing Tree program in the City of Los Angeles and the Artist-in-Residence program administered by the California Arts Council in Sacramento. The Artist-in-Residence program receives matching federal funds for local projects.

Possible Locations

The Los Angeles River right-of-way between Radford Street and Sepulveda Boulevard provides the best opportunity within the channel system for demonstrating the potential of the linear park concept. Both single- and multiple-family houses are adjacent to the channel for much of its length. In most places, adjacent single-family homes are separated from the channel by slopes or by Valleyheart Drive, which would prevent privacy conflicts. There are heavy concentrations of apartment buildings and condominiums throughout the adjacent area. Much of the channel right-of-way along this length of the river is quite wide, and there are several large open spaces where special facilities such as exercise courses, mini parks, or skating rinks could be located.

A major commercial strip along Ventura Boulevard parallels the channel for this portion of its length; it lies adjacent to the channel between Whitsett Avenue and Coldwater Canyon. The linear park would serve as a walkway from residential areas north of the channel to these stores and businesses. This function would be facilitated if tunnels or overpasses were provided at the busy streets that cross the channel. At the Gaslight Alley shopping center between Whitsett Avenue and Coldwater Canyon Avenue, the walkway could be linked with the shopping center by providing an attractively landscaped entrance and extending the existing outdoor dining area toward the channel. There are also tennis courts on both sides of the channel in this area.

Exercise courses located near any of the large apartment buildings along the channel probably would be used frequently if they were in attractive settings. A jogging path would also be popular, since many streets in the area carry heavy traffic.

The Tujunga Wash also provides an opportunity for linear park development, particularly between Laurel Canyon Boulevard and Vanowen Street. The northern and southern parts of this distance would extend the existing greenbelt area and would include the commercial zone at the Whitsett/Riverside intersection and the shopping center north of Ethel Street. The channel right-of-way is about fifty feet wide on both sides for most of this length, and there are large amounts of space available that would be suitable for a variety of uses.

Single- and multiple-family housing lies adjacent to the channel for much of this distance and is generally on grade with the right-of-way. The absence of planted slopes along the sides of the right-of-way makes the access area generally less appealing than that along the Los Angeles River; it also increases the likelihood of conflicts with channel neighbors.

A third possible location for a linear park is the Verdugo Wash from Whiting Woods Road to New York Avenue. Since all of the homes along this length of channel are single family, the project would not serve as many people as those channels adjacent to apartment complexes. There is also less of a need for a parkway in this location, since the area is not heavily urbanized. The right-of-way, however, would provide a pleasant location for a walkway. It lies along the edge of the Verdugo Hills and leads to Crescenta Valley Park.

Other possible locations for linear parks are the Santa Anita Wash from Garibaldi Avenue to California Boulevard and Aliso Creek from Saticoy Street to Roman Boulevard.

Stores or shopping centers that have potential for recreational or commercial linkage to linear parkways include those in the following locations:

- Los Angeles River
 - Gaslight Alley shopping center, between Whitsett Avenue and Coldwater Canyon Avenue (discussed above)
 - From Tujunga Avenue east to Arch Drive
- Laguna Downway from the intersection of the north end of El Segundo Boulevard

Murals should be located in places where they would enhance right-of-way developments most, such as regional trails and linear parks, and where they would be seen by the greatest number of people. When heavily traveled segments of trails must be placed on the channel floor for a significant distance, a mural on the wall near the ramp to the floor might reduce the negative reaction the rider might have toward descending into the channel. For this reason, murals might be located in the Los Angeles River — north of Downey, between the Golden State Freeway and Figueroa, south of Barham Boulevard, or north of the Hollywood Freeway — and in the Laguna Dominguez channel west of Vermont and north of Redondo Beach at El Camino College. In order to promote awareness of and interest in the trails, these murals should be placed so they can be seen from the crossing streets.

Smaller channels such as Hay, Winery, and Dunsmuir might be covered to provide space for neighborhood walkways.

POTENTIAL PROJECTS FOR NONLINEAR PARKS

There are at least fifty parks in the Los Angeles area that have some potential for making use of a flood channel, thereby augmenting park activities. The channel maps in Appendix 1 indicate parks that are adjacent to the channels surveyed.

Channels can be converted to artificial or natural streambeds, dammed or tapped to provide water for wading, swimming, fishing, or boating, and used as lead-in strips to improve access from adjacent neighborhoods. New parks could be created in some debris basins, and spreading grounds could be used as fishing ponds.

Lakes, Ponds, Artificial Streambeds, and Natural Riparian Areas

In the dry climate of Southern California, the sight and sound of water can add greatly to the recreational experience that a park offers. Natural riparian areas that existed before channel construction offered park like settings that determined the siting of many parks that now lie along channels. The channelized streams in these parks frequently represent a resource that could be recovered by restoring the streambeds to a more natural appearance, or by creating lakes or ponds for park use.

Natural Riparian Areas

In some places where a relatively small channel passes through a park and the topography provides sufficient flood protection, the concrete channel could be removed, and the natural riparian area could be allowed to recover. Very few natural streambeds remain in populated areas of the Los Angeles Basin. Restoration of a few sections of stream to a more natural condition, even in limited park settings, would reacquaint urban dwellers with the richness of the riparian habitat. It would also provide an alternative to the more formal urban park with lawns and irrigated landscaping. Walnut Creek Park near Puddingstone is a good example of a riparian area that has been retained in a relatively natural condition in an otherwise developed environment.

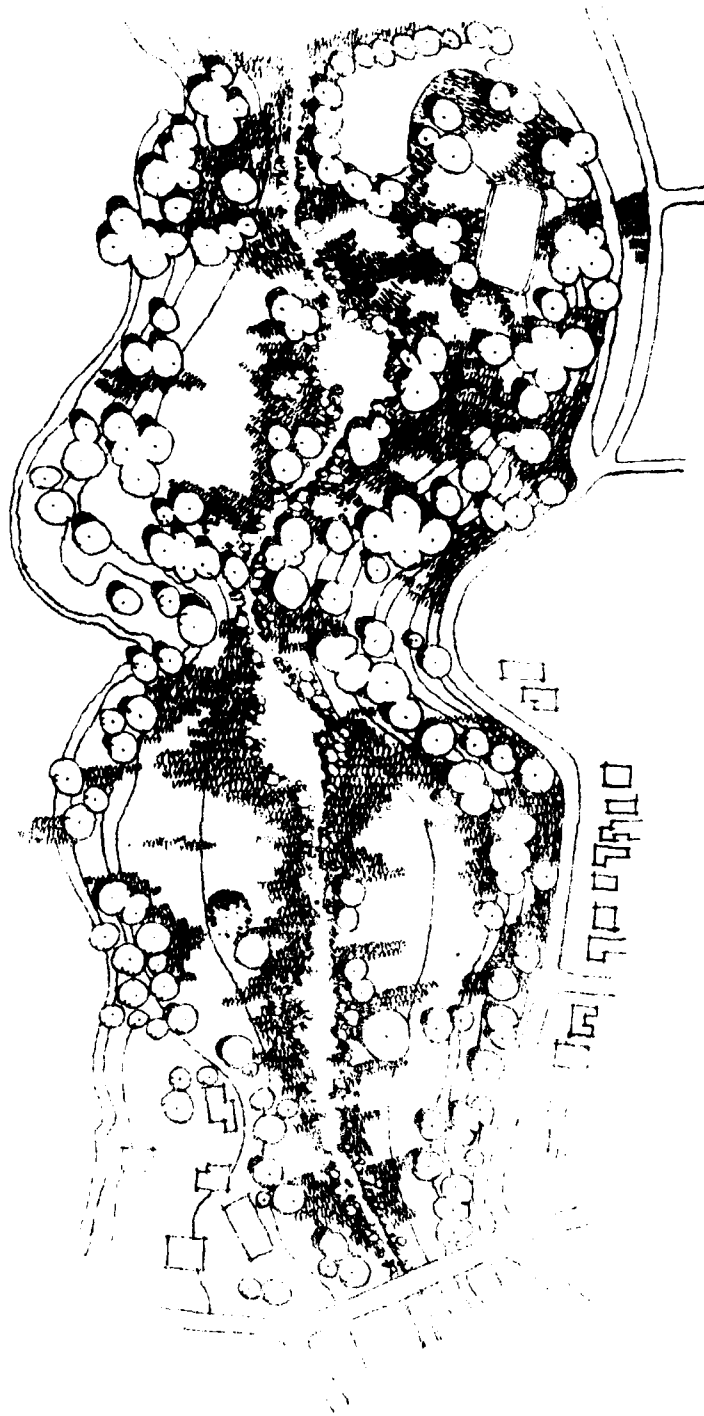
Removal of a flood channel for creation of a natural, riparian area would be done only in parks that already have a relatively natural setting. Extensive restoration of the soil might be required in many places after removal of the concrete.

Artificial Streambeds With a Natural Appearance

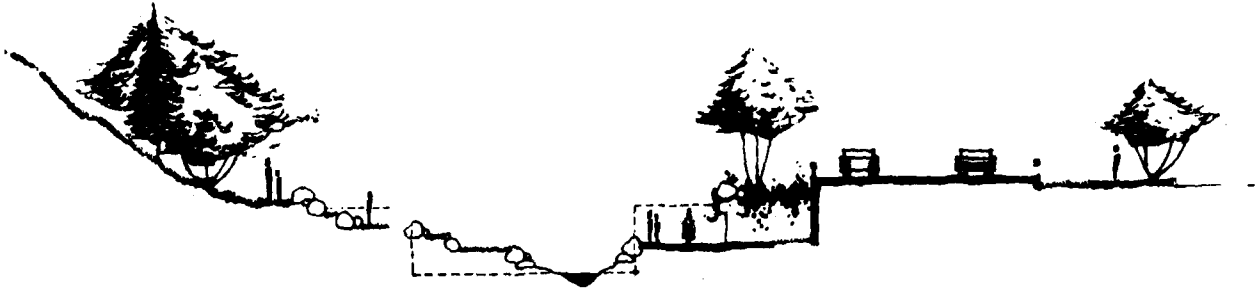
In parks with a less natural setting that have relatively small channels passing through them, an artificial streambed could be created that would provide flood protection yet would have a more natural appearance. As was done in Buena Vista Park in Burbank, such streambeds would have wide grass benches with artificial rock ledges that would restrain flood level flows. They would have a much more aesthetic appearance than conventional flood channels and would add considerably to the aesthetic quality of most parks. They would have little resemblance to natural riparian zones in California but would be more in context with the urban settings of most of the area's parks.

Lakes and Ponds

Some spreading grounds could be developed as parks, with ponds for fishing, wildlife conservation, wading (where water quality permits), or aesthetic enhancement. Ponds might also be built adjacent to flood channels in parks where the topography permits. While the channel itself would not be used in this case, the low-flow stream would be diverted to make use of the water. The "Fishing Hole" on Walnut Creek was created by diverting low flows from the adjacent channel.



Lower Arroyo Park on the Arroyo Seco. The topography here might allow retention of the character and environment of a riparian park, as shown elsewhere.



An artificial streambed such as that at Buena Vista Park in Burbank would enhance the Brookside Park area of the Arroyo Seco along Arroyo Boulevard.



Inflatable dams and structural modifications to channel sides could be employed to integrate channels into adjacent parks for wading, boating, or swimming.

Use of Dams in Channels

Sections of channel lying within parks could be dammed at both ends, using inflatable rubber dams, to provide water for recreational uses. According to the manufacturer of the inflatable dams currently used in the LACDA system, N.M. Imbertson and Associates of Burbank, such dams easily could be made at least 14 feet high. This would allow use of the full depth of most channels. The ponds created could be used for swimming or wading in places where the water quality is sufficiently high. (Water from municipal sources would be used in other cases.) The use of some kinds of boats, such as paddleboats or canoes, would be possible in some larger channels. Model boating also could be done in the channels. Generally the ponds could be used in various ways as water features for the aesthetic enhancement of parks.

Though the expense would be high, channels could be completely integrated into parks by using the bottom few feet to hold dammed water and altering the top portion of one or both sides to step the side back in several broad benches, ending some distance from the channel. These benches could be covered with grass or attractive paving patterns. A trapezoidal channel probably would be preferable for such a treatment.

The possibility of damming a large channel for use as a collegiate or Olympic rowing course was considered by the City of Los Angeles but rejected as impracticable. The channels are not wide enough, not straight for sufficiently long stretches, and would have too great a fall over the 7,200 meter length of the course.

Lead-in Strips

Easy access from the surrounding neighborhood is usually a basic requirement for a successful park. In many cases where channels are adjacent to parks, the channel right-of-way could serve as a lead-in strip to the park. These strips would extend the park into the neighborhood, improve pedestrian access in some cases, and increase neighborhood identification with the park.

The degree to which a lead-in strip along a channel would improve access would vary a great deal. A landscaped greenbelt generally would provide a more pleasant route to a park than sidewalks along city streets. In some cases, the route along the channel would be more direct and safer. Fewer street crossings would be required, since many smaller streets do not cross the channel. However, unless tunnels or overpasses were provided, it usually would be necessary to cross the

same major streets. In some cases, these crossings would be more difficult for pedestrians using the channel right-of-way, because they would occur at midblock. In most cases there would be little benefit to having lead-in strips more than a few blocks long unless tunnels or overpasses were included to provide an uninterrupted route.

The possible use of trams or minibuses to provide neighborhood transportation to parks along channel rights-of-way is discussed below (see "Transportation").

Parks in Debris Basins

Debris basins contain large amounts of land that often lie in scenic foothill canyons. The basins themselves are cleared of debris and vegetation periodically, though generally on an infrequent basis; therefore, they are unusable for most purposes other than their flood control function. There is, however, a strip of land around the rim of each basin that remains relatively undisturbed and is available for uses such as park development.

Most of the basins lie in relatively undeveloped areas and would be used most appropriately for wildlife conservation or nature study, as discussed below. Small park areas might be provided along adjacent roads or at the entrances to these basins, but these should be limited facilities that would not interfere with their conservation functions.

Some basins are adjacent to residentially developed areas and have adequate land around the perimeter to provide small neighborhood parks. In most cases, these parks would be unattractive and therefore unusable for a period of time following cleaning operations before regrowth occurred. Usually, however, they would provide pleasant settings and attractive views for neighborhood uses.

Possible Locations

The Arroyo Seco is one of the major recreational resources of the Los Angeles Basin. There are significant opportunities for adding to the recreational potential of parts of the Arroyo through modification of the channel to create natural riparian areas and artificial streambeds that would enhance the existing parks in the area.

A master plan is currently being prepared for the upper portion of the Arroyo Seco by the City of Pasadena. The nature and intensity of future development along certain parts of the channel are not now known. Most

of the land adjacent to the east side of the channel has been developed for medium-to-high intensity recreational use, including neighborhood and regional parks, athletic fields, golf courses, and the Rose Bowl.

Lower Arroyo Park between San Pasqual Avenue and Holly Street remains relatively undeveloped. There is strong sentiment for allowing this part of the Arroyo to remain undeveloped, and for restoring parts of the park to a more natural condition. Such restoration would be enhanced greatly by removing the concrete flood channel in a portion of this area and reestablishing a natural riparian zone.

It appears that the section of channel from La Loma Road to Colorado Boulevard could be removed. This section would connect to the existing unchanneled area north of Colorado Boulevard, which is about 1,500 feet long. A hydraulic study would be necessary to establish the feasibility of returning the streambed to a natural condition. However, the walls of the gorge are high along both sides of the Lower Arroyo Park, and it does not appear that removal of the channel would create a flood hazard.

North of this area, Brookside Park lies between Lower Arroyo Park and the Rose Bowl. There are athletic fields, tennis courts, and a swimming pool at Brookside Park as well as open parkland. Activity is much more intense in this area than in the Lower Arroyo Park. A pleasant, parklike strip could be created here — west of Arroyo Boulevard in the area occupied by the channel — by restructuring the channel to create an artificial streambed with a more natural appearance. This type of conversion was effected at Buena Vista Park.

Other locations that might be considered for Buena Vista-type projects are Ganesha Park (San Jose Creek), Descanso Gardens (Winery Canyon), and Almansor Park (San Pasqual Creek). At Glendora Sports Park, a stream could be run through the park by tapping the low-flow from the adjacent channel (San Dimas Wash) without altering the channel significantly.

The confluence of the San Pasqual and Alhambra channels in Almansor Park might be restructured to create a series of ponds for wading or for aesthetic enhancement of the park. Concrete and wooden decks and walls could be built around the ponds to integrate the channel confluence into the park. North of this point, the portion of San Pasqual Creek that runs through the park would be restructured into an artificial streambed. This might also be done at the confluences of other channels.

Pioneer Park in El Monte lies adjacent to the Rio Hondo channel. The channel here could be incorporated into the park by damming it at the south and north ends of the park. This would provide water for a wading pond and perhaps for other activities such as paddleboating. The opposite bank of the channel would be landscaped to extend the park visually across the channel. Access would be provided down the east trapezoidal wall using attractive paving patterns and concrete and grass benches in the wall.

A similar use of dams could be considered at places along the Arroyo Seco Park between Avenue 43 and the northern Pasadena Avenue crossing, at Cerritos Park on Coyote Creek, and at the west end of the Sepulveda Basin on the Los Angeles River.

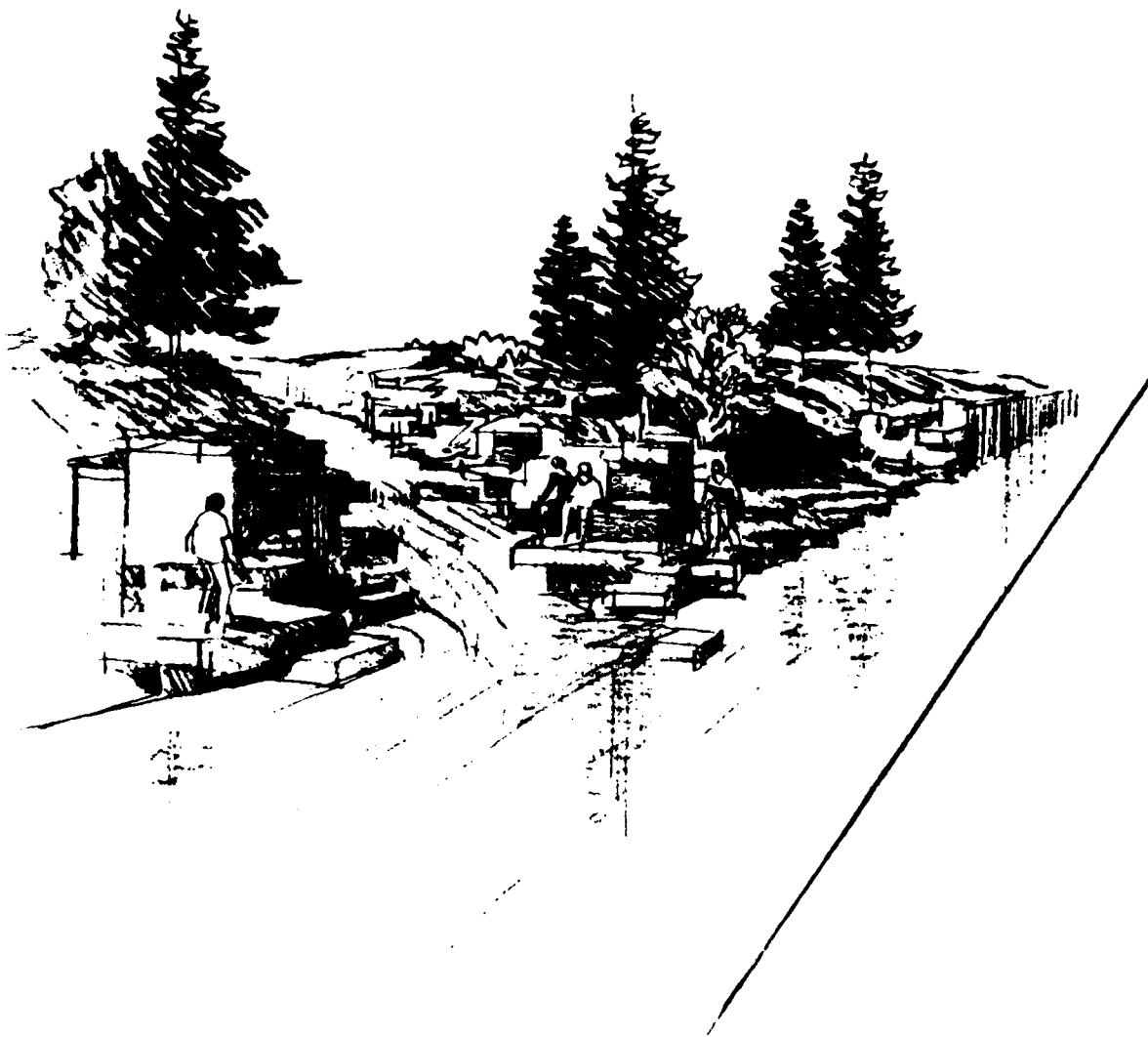
Spreading grounds that could be considered for fishing ponds or other park uses include the Forbes Spreading Basin on San Dimas Wash (adjacent to Glendora Sports Park) and Eaton Wash Spreading Grounds. The "Fishing Hole" at the Walnut Creek Spreading Grounds could be improved into a pleasant neighborhood park.

The east and north sides of the Los Angeles River from Fletcher Drive to the Burbank Studios could be developed as lead-in strips to Griffith Park. Tunnels would be needed to cross under Los Feliz Boulevard and the Ventura Freeway (west of Riverside Drive), and tunnels or overpasses would be needed to cross from the channel into the park. If these tunnels or overpasses were provided, the lead-in strip greatly would improve access to Griffith Park from the north and east. These areas are now separated from the park by freeways and the flood channel.

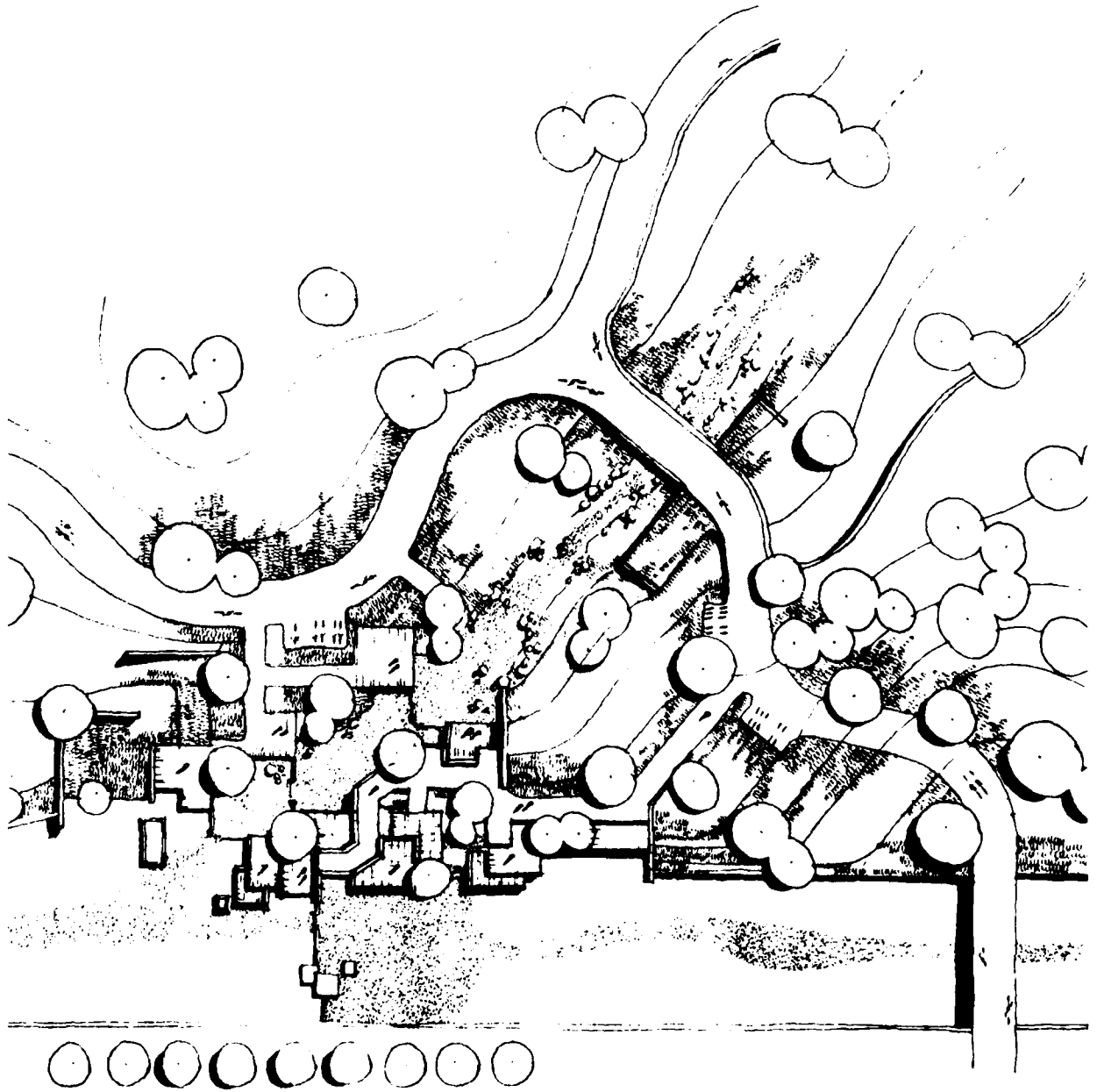
The Los Angeles River right-of-way could also be used as a lead-in strip to the Sepulveda Basin from the west. Other potential lead-in strips are listed in Table 5-1.

The Lincoln Debris Basin on Altadena channel has several acres of land fronting on Loma Alta Drive that would make a prime addition to Loma Alta Park, which is adjacent to the basin on the west. There is an excellent view of the foothills from this land, and interpretive displays might be provided explaining the geology and vegetation of the surrounding *bajada* area.

The Wilbur Avenue Debris Basin at the Aliso Creek/Limekiln Creek confluence might also be considered for development as a neighborhood park.



The drawings on these pages illustrate a park development at the confluence of two channels. Almensor Park at the San Pasqual Creek/Alhambra Wash is a possible location for such



a project. Water would be collected in pools, and streamside deck and lawn areas would be provided.

TABLE 5-1
POTENTIAL LEAD-IN STRIPS ALONG CHANNELS

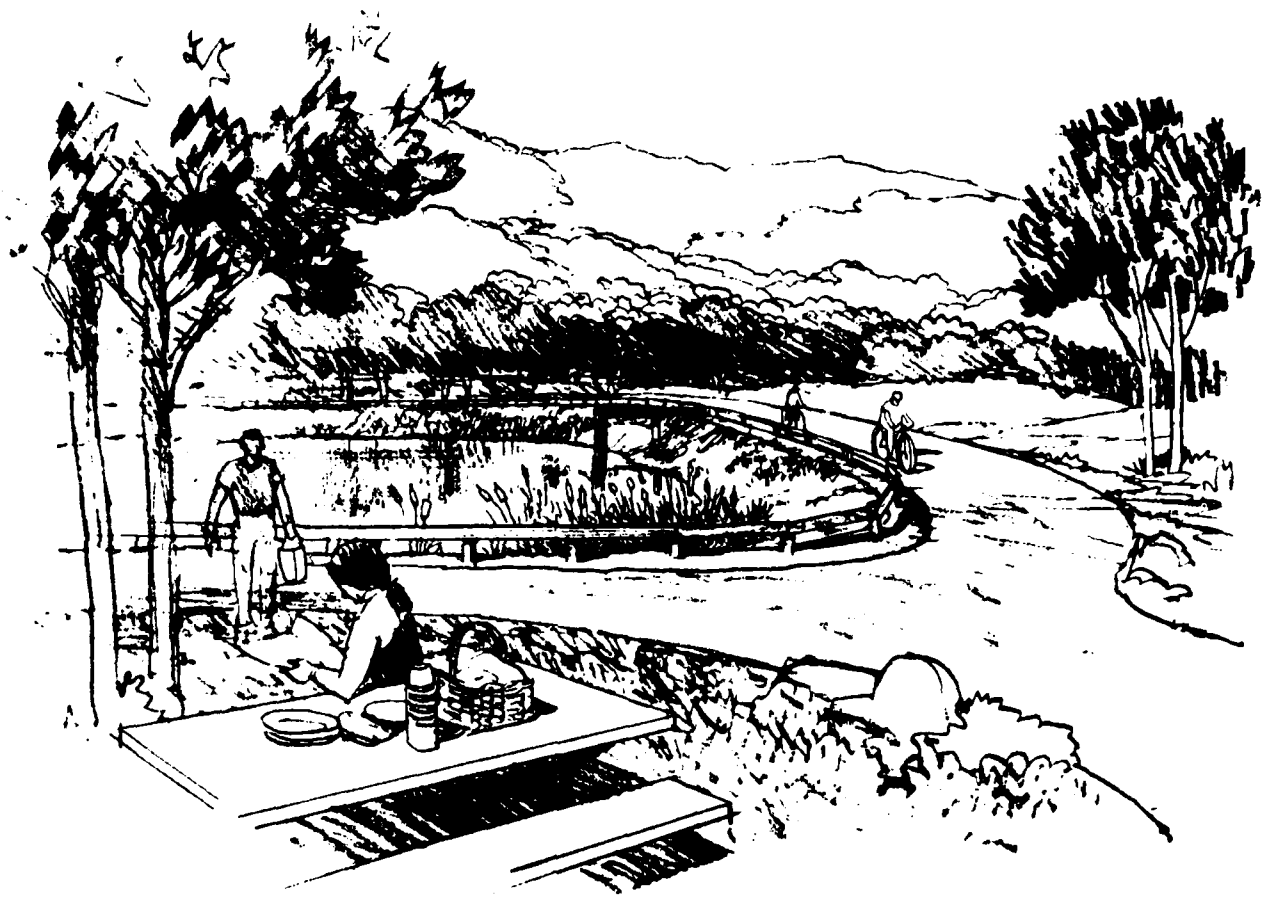
Channel	Park	Thomas Guide Map Number
Los Angeles River	Cudahy Park	59, D2
	Crystal Park	35, E4
	Elysian Village Recreation Center	35, D3
	Griffith Park	25, A4
	Buena Vista Park	24, C3
	Weddington Park	23, E4
	Sepulveda Basin (from west)	14, F5
Bell Creek	Mae Boyar Park	5, E4
Aliso Creek	Northridge Park	7, C3
Tujunga Wash	Moorpark Park	23, C3
Eaton Wash	Eaton-Blanche Park	27, F4
	Orange Grove Blvd. Park	27, F2
Santa Anita Wash	Eisenhower Park	28, E4
Sawpit Wash	Pamela Park	29, B6
Walnut Creek	Orangewood Park	48, F2
Big Dalton Wash	Central Park	39, E5
	South Hills Park	89, B1
San Dimas Wash	Hollenbeck Park	88, E3
	Gladstone Park	89, C2
	Gendora Sports Park	89, D1
San Jose Creek	Kellogg Park	93, F2
Thompson Creek	L. A. County Fairgrounds	90, D5
Coyote Creek	Lee Ware Park	81, B5
	Cerritos Regional Park	81, C2
	Bettencourt Park	81, D1
	McComber Park	83, B4
Compton Creek	Ramon Gonzalez Park	64, D2
Laguna Dominguez	Alondra Park	63, B4
	Imperial Park	57, B5

NATURE STUDY AND WILDLIFE CONSERVATION

The LACDA flood control system, including reservoirs, flood basins, spreading grounds, debris basins, and flood channels, contains a large percentage of the open space and habitat area remaining in the urbanized regions of the Los Angeles Basin. The system supports large areas of vegetation and provides habitats for a variety of wildlife. It includes portions of Significant Ecological Areas (see Figure 6) at the Whittier Narrows, the Santa Fe

Flood Basin, Hansen Dam, the Chatsworth Reservoir, along the upper San Gabriel River, and near the mouth of Ballona Creek.

During the channel survey, rabbits, squirrels and snakes were seen in channel rights-of-way. Birds are also common in and around the channels. In those reaches of the Los Angeles and San Gabriel Rivers that have unpaved bottoms, large amounts of riparian vegetation exist. Fish are common in the channels, and on several occasions



Park and trail development around a debris basin or spreading ground.

during the survey, children were seen netting them. A school of several hundred goldfish and carp, many four to six inches in length, was seen in a completely paved section of the Los Angeles River.

The system serves an important function by providing habitats for wildlife in the urban area. This function will increase in significance as open space continues to diminish in the basin. Wildlife sanctuaries exist or are planned at a number of reservoirs and spreading grounds. This should be encouraged in other similar places, but consideration should also be given to making maximum use of the large amounts of land available within the channel rights-of-way. Since secondary uses such as trails are planned for these rights-of-way, the plants selected for landscaping should be those that provide food and habitat for birds and other small wildlife. Special nesting structures built under bridges might attract a wider variety of birds than the pigeons usually found there.

The upper San Gabriel River between the Santa Fe Flood Basin and the upper end of the San Gabriel Canyon Spreading Grounds is very rich in ecological resources. Therefore, it should be maintained to preserve the rare vegetative community that exists there and the wildlife it supports. The Tujunga and Rio Hondo Spreading Grounds also contain ecological resources that should be preserved. A wildlife sanctuary is planned for the Rio Hondo Spreading Grounds. The Bixby Slough south of the Lakewood Country Club in Long Beach also has potential for a wilderness area.

Debris basins in the foothills provide valuable habitat area for wildlife. Some of these basins contain ponds that serve as resting and feeding spots for migrating birds. Since the basins are cleared of debris and vegetation periodically, the land around the periphery of the site, outside the basin itself, is of the most value for habitat areas. Procedures should be developed for managing these areas so as to encourage their use by wildlife. Holes should be provided in fences in areas that are not easily accessible from roads in order to allow wildlife to use the water in the basins. Nature study facilities might be included at some of these basins, since the foothill areas are rich in points of geological and biological interest.

Most of the debris basins have some value as wildlife sanctuaries. Of particular interest, however, are the Little Dalton Debris Basin and the Big Dalton Debris Basin and Spreading Grounds. Both of these facilities

have lakes, and both are bordered by the San Dimas Experimental Forest, which would act as a buffer area for the sanctuaries.

The assistance of qualified naturalists and biologists should be sought in determining those parts of the LACDA system that have the most potential for conservation uses, as well as the methods through which this potential can best be used.

TRANSPORTATION

Non-Recreational Transportation Projects

The potential of the flood channel system to provide corridors for mass transit systems or other transportation needs has long been recognized. The channel rights-of-way constitute an in-place network of potential routes, already paid for to a large degree, that could link most major parts of the region.

A number of suggestions have been made concerning possible transportation uses of the LACDA system. Since the focus of this study is on recreational uses, these transportation proposals have not been evaluated here. (Proposed bicycle trails, discussed in the last chapter, are an exception; these would serve both transportation and recreational needs.)

Since transportation systems located within channel rights-of-way could affect the channels' potential for recreational use, as well as the use of adjacent parks, the major recent transportation proposals that involve the use of flood channels are listed below in order to provide an overview of the transportation potential of the system. A separate Corps of Engineers study of transportation proposals is currently under way.

Parts of the floor of the Los Angeles River already have been used for training of drivers by various departments of the County and City of Los Angeles and the Southern California Rapid Transit District.

- The *Reconnaissance Report for San Pedro Ports* (Ref 5-3, pages 45, 51, 53) recommends the use of air-cushion vehicles for transporting cargo and people through the flood channels.
- The same study (page 51) mentions the possibility of using conventional heavy rail or light rail transit along the channel banks, or a new type of monorail system with light, elevated structures.

- The same study (page 52) also discusses the possibility of barge transport in the lower portions of the Laguna Dominguez channel.
- A 1976 CALTRANS study (Ref 5-4) proposes use of the Los Angeles River floor from Imperial Highway to First Street as a busway for transporting commuters to the central business district of Los Angeles. Since this study was done, CALTRANS has also discussed the possible use of the Los Angeles River channel from San Pedro to the Golden State Freeway as a truck route (Ref 5-3, page 49).
- A 1972 CALTRANS study (Ref 5-5) proposes use of the Los Angeles River floor from Willow Street to the Golden State Freeway as an alternative route to the Long Beach Freeway for autos, trucks, and buses.
- The Sunset Coast Line transit system proposal (Ref 5-6), rejected by Los Angeles County voters in a 1976 referendum, contained two transit lines that would have made use of the Los Angeles River corridor. The Central Line North would have included a subway under the channel from the Union Station area to the Golden State Freeway, with rails along the top of the east bank from the Golden State Freeway to the Glendale Freeway. The Los Angeles River Line would have included an aerial railway along the west bank of the river from Union Station to First Street, and an at-grade rail from First Street to Gage Avenue. The Sunset Limited proposal (Ref 5-7), a much reduced version of the Sunset Coast Line plan presented in 1978 by Baxter Ward, contains no proposed routes along channel corridors.

Use of the Channel System for Transportation to Parks

In Chapter 4, which dealt with potential bicycle and equestrian trails, emphasis was placed on providing access to parks and other recreational facilities through the channel rights-of-way. Park access might also be improved through the use of trams or mini-buses for transporting people from adjacent neighborhoods through channel lead-in strips to parks.

There are two possible approaches to using mass-transit vehicles within the channel corridors.

- The vehicles could make use of the channel floor in cases where the floor is wide, flat, and contains a low-flow channel. Channels suitable for such use are listed in Table 5-2.

Some modifications would be required in the channels to transport side inlet flows to the low-flow channel under the section of floor to be used. Ramps would be provided to the channel floor at destinations and at pick-up points.

- The vehicles could use access roads along the sides of channels. This would allow transportation along those channels that do not have bottoms suitable for vehicular travel. It would be necessary, however, to tunnel under or cross over streets and other obstructions to the channel rights-of-way. This would limit the practical length of the lead-in strips, and in cases where a number of street crossings were required, it would reduce or eliminate any advantage to the use of a channel over city streets. Use of the channel access roads for vehicles might also conflict with the possible use of these roads for bicycle and equestrian trails.

Table 5-3 indicates possible locations of tram or mini-bus routes for transporting people to parks through channel corridors.

It has been suggested that transportation to parks might be provided for the aged and handicapped using trams or mini-buses. Potential users of such means of transport would be from retirement homes, hospitals, homes for the disabled, and similar facilities located in the vicinity of flood channels. During the channel survey, any such facilities adjacent to the channels were noted. Generally, however, it was not possible to locate all of the facilities of this type that might be close enough to the channels to make use of such routes.

To test the concept, hospitals in the vicinity of channels were considered as possible sources of those who would use these means of transport, since they often contain programs or facilities for the elderly, disabled, and handicapped. Hospitals near channels were identified on maps for the purpose of route analysis. These hospitals and other facilities located during the survey are listed in Table 5-4.

An attempt to identify potential routes to parks through channel corridors from the facilities listed indicates that the concept would have limited applicability. Only two facilities were identified that would appear to benefit from such a project. St. Joseph Medical Center (near the Los Angeles River at Buena Vista Street) could be linked to Griffith Park by a short tram route, and

TABLE 6-2. CHANNELS WITH FLOORS SUITABLE FOR RECREATIONAL OR TRANSPORTATION USE

The following channels have floors that are sufficiently wide and flat to be suitable for recreational or transportation use. Since they also have low flow channels, the floors remain dry most of the year.

- Los Angeles River
 - Rio Hondo confluence to Golden State Freeway north of Figueroa
 - Burbank Western inlet to Radford Street
 - SPT railroad crossing east of White Oak Avenue to Mason Street
- Brown's Creek
- Aliso Creek south of Wilbur Debris Basin
- Arroyo Seco from Holly Street to Seco Street
- Coyote Creek south of Artesia Boulevard
- Coyote Creek, North Fork
- Laguna Dominguez from Vermont to north of Redondo Beach Boulevard

Portions of the Tujunga Wash, Big Dalton, and the Los Angeles River between Radford Street and Fulton Avenue might be added to this list if a curb were provided to channel low flows to one side of the floor.

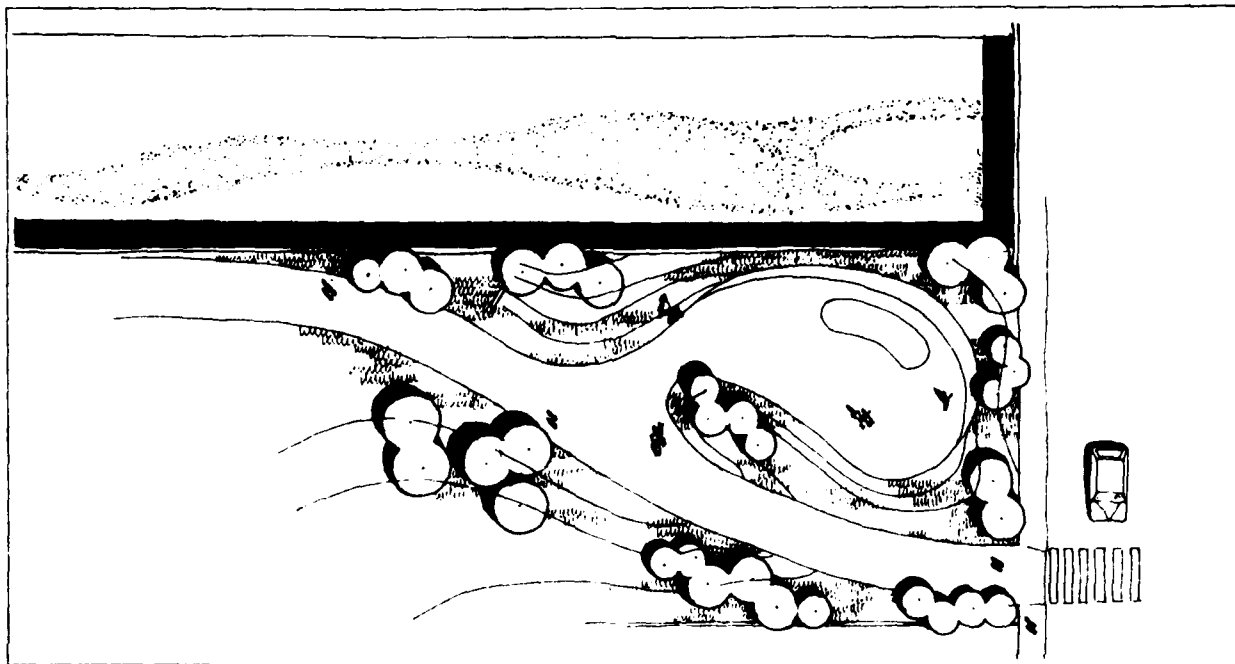
TABLE 6-3. POSSIBLE TRAM OR MINI-BUS PROJECTS

- Los Angeles River/Tujunga Wash -- connecting Griffith Park, Weddington Park (Los Angeles River at the Hollywood Freeway), and Moorpark Park (Tujunga Wash at Laurel Canyon Boulevard)
- Los Angeles River -- connecting the Sepulveda Basin and Reseda Park (Los Angeles River at Reseda Boulevard) to residential areas as far west as Pierce College
- Big Dalton -- from Barranca Ave. to Foothill Boulevard, providing access to South Hills Park in Glendora
- Coyote Creek -- connecting El Dorado Park to Cerritos Regional Park
- Laguna Dominguez -- from Vermont Avenue to Alondra Park.

**TABLE 6-4
MEDICAL AND SENIOR CITIZEN FACILITIES LOCATED NEAR CHANNELS***

Channel	Facility	Thomas Guide Map No.
Los Angeles River	Monte Sano Hospital	35, B2
	St. Joseph Medical Center	24, C3
	Sherman Oaks Community Hospital	22, D2
Bell Creek	Parkwood Hospital	12, B4
	West Hills Hospital	12, A3
Brown's Creek	Canoga Park Hospital	12, D3
Tujunga Wash	Riverside Hospital	23, B2
Burbank Western	Villa Scarabrini Retirement Home	9, F6
Eaton Wash	Las Encinas Hospital	27, E4
	St. Luke's Hospital	27, E1
Buena Vista Channel	City of Hope Medical Center	29, D6
Sawpit Wash	Monrovia Community Hospital	29, B3
	Sanitarium (name unknown)	29, C2
Walnut Creek	Queen of the Valley Hospital	48, F2
San Jose Creek	Pacific State Hospital	93, F4

*Note: This is a partial list, compiled from maps and channel survey information.



Channel access roads could be used for skate paths, and open areas within the right-of-way for skating rinks.

Riverside Hospital (Tujunga Wash at Riverside Drive) similarly could be linked to Moorpark Park. In every other case, either transportation would be easier over city streets, or there would be no sufficiently attractive destination for a route within a reasonable distance along the channel.

It is likely that other feasible projects of this type could be identified by local agencies familiar with the locations of facilities that would benefit from improved access to parks. However, in most cases, it is not probable that the benefits achieved would justify the costs of the project.

SKATING AND SKATEBOARDING

The recent increase in the popularity of roller skating has resulted in serious conflicts between skaters and bicyclists over the use of bicycle paths, particularly in the Venice area and at the Sepulveda Basin. An effort is being made to develop separate facilities for skaters, and interest has been expressed in the use of flood channel corridors for skate paths. These paths could be located either on access roads along the sides of channels or, in some cases, on channel floors.

Access roads could be used wherever bicycle or equestrian trails are not planned, or where there is sufficient room for both bicycle and skating paths. Wide spaces along the access roads, such as those that occur at some street crossings, could be used for circular rinks. These might have grassy slopes around the sides for spectators.

The channel floor could be used for skating wherever it is wide, flat, and contains a low-flow channel. Channels suitable for such use are listed in Table 5-2.

Despite the potential for locating skating paths and rinks within channel corridors, it is likely that many of these paths would receive little use. Areas used heavily by skaters are usually popular recreational facilities that offer a combination of recreational and social opportunities to users; the skating facilities themselves are not the sole attraction. It would be desirable, therefore, for skating paths to be located near parks or other recreational facilities. In general, these other facilities would provide better locations for skating than the channel paths. The bottom of channels have restricted views and a generally poor aesthetic quality which probably would not attract large numbers of skaters. Finally, in most neighborhoods, sidewalks offer an alternative that

often would be more convenient and equally as attractive to skaters as paths along the channels. The most promising locations for skating paths within channel rights of way are along lead-in strips to parks.

Channels that might offer good potential for skating paths or rinks are:

- Los Angeles River floor west of the SPT railroad in the Sepulveda Basin
- Tujunga Wash access roads from Moorpark Park to Magnolia Boulevard
- Laguna Dominguez floor from Van Ness Avenue to Alondra Park.

Similarly, it appears that there would be little advantage to a skateboarder to the use of a channel path over sidewalks. Rinks with banked sides might be popular with skateboarders, if they were located in areas with sufficient recreational appeal. However, these probably would be best operated as commercial facilities, since supervision would be required to ensure safety.

HOSTELS AND CAMPGROUNDS

The California Department of Parks and Recreation recommends in its Recreational Trails Plan (Ref 5-7, page 17) that hostels and campgrounds be provided on trail corridors that are heavily used for touring. Such facilities should be located on major regional trails, and preferably near the intersections of major trails. They would best be located at major recreational facilities because of their spatial requirements and the recreational opportunities that these facilities offer.

The Whittier Narrows is the most likely location for a hostel or trail campground, because it is accessible from both the LARIO and San Gabriel trails and would be near the central point of a regional trail system. The Sepulveda Basin might also be a suitable location if trails are developed on the Los Angeles River. Vacant land at the confluence of the Los Angeles and Tujunga channels and at the confluence of the Los Angeles and Rio Hondo channels could be used for overnight facilities, if trails are located on the upper Los Angeles River and Tujunga Wash.

Other locations within the LACDA system, such as debris basins and other flood control basins, might have sufficient space for overnight facilities but would not be located along major through trail routes.

USE OF THE CHANNEL FLOOR FOR COURT GAMES

The floors of some channels are sufficiently wide and free of water for enough of the year to allow court games such as basketball, volleyball, handball, paddleball, or tennis.

A major problem with such use would be keeping players and balls out of the low-flow channel. Protective fencing probably could not be used in the channel, unless it were of a removable type, and the amount of work required to move the fencing several times each year would probably be prohibitive.

If the floor were to be used for tennis, fencing would be needed across the channel as well as along the low-flow ditch. The courts would require cleaning each time the flow of water rose above the low-flow channel. Frequent repainting of court boundaries would probably be necessary.

In the event that fencing could be provided, it is likely that only the Los Angeles River and Coyote Creek would have sufficiently wide floor spaces to permit court games. The most suitable location for such activity would be that section of the Los Angeles River between Barham Boulevard and Radford Street, since Coyote Creek and the other potentially usable segments of the Los Angeles River have trapezoidal sections, which would be less suitable for most court games. Game courts on the channel floor might be made part of a linear park in this area.

MOTORCYCLE USE AND BICYCLE MOTOCROSS COURSES

Most parts of the channel system are poorly suited to motorcycle use. The noise of the cycles makes them incompatible with many other potential channel uses, particularly horseback riding. The noise would also compound problems with channel neighbors; these conflicts are already severe in some places. Because bicyclists benefit much more from separation from traffic, bicycling has priority on access roads suitable for trail use.

The best locations for motorcycle use within a channel corridor appear to be the Los Angeles River channel on the east side of the river, north and south of Firestone Boulevard, and between the Randolph Street railroad bridge and Slauson Avenues. In both of these locations, there are wide strips of vacant land along the power line

right-of-way that separates the channel from the Long Beach Freeway. The freeway would buffer the motorcycle activity on the east and the channel on the west, and the existing freeway noise would reduce the effect of noise from the cycles. Adjacent use west of the river in both places is heavily industrial. These locations could be used for motocross courses.

The major drawback to these locations is that both bicycle and equestrian trails are recommended for the channel corridor in these places. Bicyclists would be on the west side of the channel, and noise levels would probably be acceptable there if the motorcycle activity were confined to one location. An equestrian trail on the east side, though, probably would be incompatible with motorcycle use in the same area. However, there are significant problems associated with the equestrian trail recommended for this area. If the decision were made not to include an equestrian trail here, then a motocross course should be considered as an alternative use.

The floor of the channel from Gage Avenue to Figueroa Street might be used as an off-street route for motorcyclists, thereby providing an auto-free alternative to the use of the Long Beach Freeway. Again, this would be feasible only if no conflicts with bicyclists or equestrians resulted.

Some debris basins might also provide suitable locations for motorcycle activity. Basins selected for such use should not have significant potential for conservation uses, nor neighbors that might be affected by the noise.

An ORV (off-road vehicle) staging area is planned by the Los Angeles County Department of Parks and Recreation for the upper end of the San Gabriel Reservoir. The facility will be partially on reservoir property and partially on National Forest land.

During the channel survey, children frequently were observed using dirt access areas along the sides of channels as bicycle motocross courses. There are numerous wide dirt spaces along the channel rights-of-way that would be suitable for such use.

AIR RIGHTS

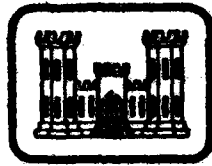
Interest in air rights over the channels is increasing as available land in the Los Angeles Basin becomes more scarce and more expensive. Several large sections of channel have already been covered for a variety of

purposes, and other proposals are being studied. Most of these proposals involve nonrecreational uses, but channels could be covered to provide open spaces for parks, trails, athletic fields, or most other recreational activities.

Ralph Iredale, in his study on the potential for use of air rights in the Los Angeles Basin (Ref 5-9), discussed a number of possible projects involving air rights over the Los Angeles River. These included housing projects and megastructures that could contain offices, apartments, or department stores.

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Chapter 6.

Implementation

CHAPTER 6 IMPLEMENTATION

COORDINATION AMONG PLANNING AGENCIES

Effective coordination is required among agencies at all levels of government, and between these agencies and various types of citizens' groups, to plan and implement any regional recreation program. This is especially true in the Los Angeles region, since the great mobility of the population encourages use of recreation facilities some distance from users' homes.

The rising interest in bicycling during the last few years makes coordination among planning agencies and groups even more important. Regional needs and trail corridors can be determined by regional planners. If specific routes within these corridors are to be most effectively designed and most heavily used, they must be chosen with assistance from local planners and those citizens who are most familiar with the specific areas.

This is an important consideration in the case of the trails discussed in Chapter 4, which would be located within flood channel corridors. Local planners should have an opportunity to recommend alternative routes that might be more attractive because of fewer obstructions, better aesthetic quality, lower costs, or better access to recreation areas. This will ensure that the 710 Program funds (see Table 6-2) available for this area will be used most effectively on those channel corridors with the most potential for contributing to the regional trail system.

Close coordination among planning organizations is not easy to achieve. There are many jurisdictions in the area and many agencies and groups involved in trail planning, each with its own constituency and interests. The roles of agencies continually evolve to fit current planning needs, and sometimes change abruptly as a result of major influences such as Proposition 13. Table 6-1 lists the agencies and citizens' groups most actively involved at this time in the planning of trails within the LACDA region.

The Los Angeles County Plan of Bikeways (Ref. 6-1), which is a subelement of the County General Plan, is used as a general guide to regional bicycle planning in this area. This plan is quite conceptual in nature, and

many of the routes it shows have not yet been studied in detail. A second important document is the Bicycle Plan of the City of Los Angeles (Ref. 6-2), which is a subelement of the City General Plan. This plan is based on a Bikeway Feasibility Study done by the City of Los Angeles (Ref. 6-3), which evaluated potential bike route corridors. Many of the potential routes shown on the City Bicycle Plan are also quite conceptual in nature, and will require further study before final route decisions are made.

Other cities in the area having significant local bicycle plans include Long Beach and Pasadena (Ref. 6-4, 6-5). A number of cities have formed the East San Gabriel Valley Bikeway Committee and have published a Master Plan for bike routes in that area (Ref. 6-6). There is also a West San Gabriel Valley Bikeway Committee (coordinated through the Arcadia City Planning Department) and a Pomona Valley Regional Bicycle Trail Committee (coordinated through the Pomona City Administrator's Office).

While no single agency serves to coordinate bikeway planning in the Los Angeles area, three agencies – SCAG, the Los Angeles County Transportation Commission (LACTC), and Los Angeles County Parks and Recreation Department – serve to provide some regional coordination. County Parks and Recreation achieves this through its countywide planning role while LACTC and SCAG administer regional bikeway funds, particularly S.B. 281 Transportation Development Act funds (see Table 6-2). The work of these agencies ensures that a portion of the local bikeway planning effort goes toward producing long distance regional trails, rather than isolated shorter segments which serve only local purposes.

There has been much less regional coordination of equestrian trail plans than of bicycle plans, primarily because there are fewer sources of funding for equestrian trails and less opportunity to achieve coordination through the distribution of funds. The Los Angeles County Parks and Recreation Department provides the only regionwide coordination of equestrian trail planning in the area. Several jurisdictions within the region,

TABLE 8-1. AGENCIES AND GROUPS MOST ACTIVELY INVOLVED IN TRAIL PLANNING IN THE LOS ANGELES AREA

Federal

U.S. Army Corps of Engineers – Cooperates with local agencies in the planning and construction of trail projects within flood channel corridors and flood basin recreational areas. Provides 50 percent matching funds for these projects.

U.S. Forest Service – Has an interest in connections to Forest Service trails from the urban area.

National Park Service – Is investigating potential access routes from the urban area to proposed Santa Monica Mountain Park trails.

State of California

Department of Parks and Recreation – Has established three state trail corridors that pass through the Los Angeles region. Except for portions of the South Bay trail, specific routes within these corridors have not yet been determined.

CALTRANS – Has established bicycle trail design standards that are used by most planning agencies in the Los Angeles region.

Regional

Southern California Association of Governments (SCAG) – Administers S.B. 821 Transportation Development Act funds. These funds are a major source of revenue for bicycle trail projects in the area.

Los Angeles County

Department of Parks and Recreation – Holds the major responsibility for regional trail planning in the Los Angeles area. Has lead agency responsibility on many trail projects, including LARIO and San Gabriel.

Department of Regional Planning – Prepares land use plans and policies that provide a conceptual framework for more specific design functions, such as location of trail routes. Also provides regional data base information used for trail planning.

Road Department – Acts as lead agency for the development of many bicycle trails along streets and flood channels.

Flood Control District – Must grant a permit for any secondary use of flood control lands.

Transportation Commission (LACTC) – Reviews grant requests for S.B. 821 Transportation Development Act funds. Provides regional coordination of trail planning through the performance of this function.

Local

City Departments of Planning, Transportation, Recreation and Parks, and Engineering – In particular, various departments of the City of Los Angeles play a significant role in regional trail planning.

Citizens' Groups

City of Los Angeles Bicycle Advisory Group – Actively assists city planners in developing bicycle routes and other facilities to encourage the use of bicycles in the area.

Equestrian Trails, Incorporated – A large, active group of riders that organizes equestrian activities in the area. The local "Corrals" sometimes provide assistance or suggestions to local agencies involved in trail planning.

particularly the County's First Supervisorial District and the Twelfth Councilmanic District of Los Angeles City, have equestrian trail plans (Ref. 6-7, 6-8). The City of Los Angeles has collected a large amount of information on local trail systems, but it has not yet done much work toward integrating these trail systems to provide long-distance routes. A review of equestrian trail planning is scheduled by the city for the near future.

So far, it appears that very little consideration has been given to connecting the extensive equestrian trail system in the San Fernando Valley with the LARIO/San Gabriel trails or with trails in the San Gabriel Valley in order to link the two halves of the region.

The Corps of Engineers has a unique opportunity to encourage increased regional coordination of trail planning efforts because of the possibility of contributing to the development of a regional system of bicycle and equestrian trails through the use of flood channel corridors and because of their responsibility for administering distribution of Code 710 funds on a regional basis. Such coordination could be encouraged by the formation of a regional council of bicycle planners and a regional council of equestrian planners to review Corps' efforts toward developing trails in the channel system. Although these councils would have only advisory powers, they could achieve a great deal toward the selection of optimal routes for a regional system, toward reducing development of isolated trails that make no contribution to larger trail systems, toward providing a more complete regional data base for trail system planning, and toward providing increased emphasis on trail planning efforts at both local and regional levels.

Considerable cooperation was provided by agencies at all levels of government toward completing the LACDA System Recreation Study, and much interest was expressed in developing a regional data base for trail planning. Differences among agencies that are often cited as stumbling blocks toward regional coordination appear generally to involve priorities and methods. There seems to be very little disagreement on the selection of routes or the determination of regional trail system needs, and there appears to be a real opportunity at this time for achieving increased coordination among the area's trail system planners.

The longer it takes to achieve the formation of such coordinating groups, the less effective their work will be. Urbanization, continued construction of freeways

and flood channels, and rapidly increasing use of flood channel and power line rights-of-way for a variety of purposes has resulted in a steady decrease in potential trail corridors, making the development of regional trail systems increasingly more difficult in the future.

POTENTIAL SOURCES OF FUNDING

The Code 710 Recreation Program of the U.S. Army Corps of Engineers provides funds for the development of recreation facilities on existing Corps projects. The program funds 50 percent of the design and construction costs of a project with the remaining 50 percent to come from nonfederal agencies. Projects must be operated and maintained by local agencies. The 710 Program has been a major source of funding for recreation projects in the Los Angeles region in recent years.

Another major source of money for bicycle projects is S.B. 821, the Transportation Development Act Fund, that allocates money derived from state sales taxes on gasoline. Two percent of the sales tax money allocated to local transportation projects is used exclusively for bicycle and pedestrian facilities. These funds are administered locally by SCAG. Funding requests are reviewed by the Los Angeles County Transportation Commission. In the 1979-80 fiscal year, 60 percent of the funds will be allocated to local projects and 40 percent to regional projects. Funding criteria for regional projects include projected use, encouragement of alternatives to existing transportation, completion of missing links or extension of existing facilities, safety, and potential for implementation in the year of allocation.

Grants that encourage innovative approaches to recreation planning might be applicable to some projects described in the preceding chapters. For example, the use of inflatable dams to incorporate a section of flood channel into a park for wading, swimming, or boating might be considered an innovative project. Both federal and state programs (the Federal Urban Parks and Recreation Recovery Act and the State Urban Grants Program) provide innovative approach funding.

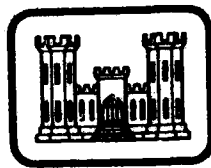
Information on these and other major sources of federal and state funds is summarized in Table 6-2. Additional information on federal programs is available in the *Catalog of Federal Domestic Assistance* published by the Office of Management and Budget. Additional information on state programs is available from the Urban Action/Assistance Program of the State Department of Parks and Recreation in Sacramento.

TABLE 6-2. POTENTIAL SOURCES OF FUNDING

Funding Source (Administering Agency)	Enabling Legislation	Comments
FEDERAL		
U.S. Army Corps of Engineers (Same)	Code 710 Program, as established by PL 89-72, the Federal Water Project Recreation Act. Veysey Guidelines further define cost-sharing requirements.	Provides 50 percent of the cost of most recreational development at completed Corps projects. Costs must be shared equally by non-Federal agencies. Completed project must be operated and maintained by local agencies.
Federal-Aid Highway Program (CALTRANS)	1973 and 1976 Federal-Aid Highway Acts	Provides matching funds for bicycle and pedestrian facilities. \$2.5 million were provided for California projects in 1977.
Land and Water Conservation Fund (Heritage Conservation and Recreation Service, Dept. of Interior, California Dept. of Parks and Recreation)	Land and Water Conservation Fund Act of 1965 (PL 88-578)	Provides funds for outdoor recreation planning and development. 50% matching grants to counties and cities.
Department of Interior (Heritage Conservation and Recreation Service)	Urban Parks and Recreation Recovery Act (UPARR). Title X of the National Parks and Recreation Act of 1978.	<p>Three types of grant:</p> <ol style="list-style-type: none"> 1. Recovery Action Program Grants for overall improvements in recreation system (50% matching) 2. Grants for Innovative Approaches (70 to 85% matching) 3. Rehabilitation Grants for rehabilitation of existing recreation facilities (70% matching)
STATE OF CALIFORNIA		
Transportation Development Act Fund - Also known as Local Transportation Fund (SCAG)	S.B. 821 (Article 3 of the Transportation Development Act)	For development of bicycle and pedestrian facilities. In 1979-80, 80% of fund money will go to local projects and 40% to regional projects. Total allocations for 1978-79 are \$2,266,428.
Bicycle Lane Account (CALTRANS)	S.B. 38	A minimum of \$360,000 annually is made available through this program for bicycle projects. Priorities are based on ability to attract matching Federal funds.
Urban Grants Program (California Dept. of Parks and Recreation)	S.B. 174: Robert-Z'berg Urban Open Space and Recreation Program	Provides grants for the development and operation of recreation facilities in heavily populated areas, and for innovative recreation programs.

CHAPTER 6: REFERENCES

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Appendix 1.

Survey Notes

A visual survey of the major flood channels in the LACDA system was conducted to obtain data necessary to evaluate the recreation potential of the channels. About 220 miles of channel were surveyed. The San Gabriel River, the Rio Hondo River, Ballona Creek, and that portion of the Los Angeles River below the Rio Hondo confluence were not included in the survey, since these channels were previously studied during the planning of trails now existing or under construction.

The survey focused on the following kinds of information:

- The physical suitability of the channels and channel access areas for trail use.
- Obstructions to travel along the channel access areas, such as street crossings, inlets, and other secondary uses of the right-of-way.
- Other constraints to recreational use, such as potential conflicts with channel neighbors.
- Opportunities for recreational use, such as good views, proximity to parks or other trail destinations, and areas within the channel rights-of-way large enough for recreational uses other than trails.

CROSSING AND INLET RATINGS

Street crossings and inlets that obstruct access along channels are rated on the survey maps to indicate the potential significance of the obstruction. This was done according to the following criteria:

	FREEWAY	RAILROAD OR STREET WITH HEAVY TRAFFIC	MODERATELY BUSY STREET	STREET WITH LIGHT TRAFFIC
No tunnel or ramp possible.	A	B	C	D
Vertical Channel, tunnel long or difficult to construct.	B	C	D	E
Vertical channel, tunnel not difficult; or trapezoidal channel with a ramp that would be long or difficult to construct.	C	D	E	F
Trapezoidal channel, ramp not difficult.	D	E	F	G

Key to Maps and Notes
(overleaf)

KEY TO STRIP MAPS

Scale: 1"=2800'

- Notes concerning ROW
- Notes concerning adjacent use
- ✱ Problem
- ✱ Opportunity
- △△△△ No access
- ▬ Covered channel
- ⊥ Footbridge (no obstruction)
- Bike Trail (existing)
- Equestrian Trail (existing)
- No obstruction
- ▶ Beginning of Reach

CROSSING AND INLET RATINGS

Crossings and inlets are rated from A to G to indicate the potential significance of the obstruction they present to trail access. See text for a more detailed explanation of the ratings.

- (A)
- (B) Major Obstructions
- (C)
- (D) Moderate Obstructions
- (E)
- (F) Minor Obstructions
- (G)

KEY TO NOTES

REACH

Downstream limit of reach is given first.
TG: 1979 Thomas Guide map number.

CHANNEL

Trap	Trapezoidal	LS	Loose stone
Vert	Vertical	U	Unpaved
C	Concrete	LF	Low-flow channel
RR	Rip-Rap		

ADJACENT USE

SF	Single Family Housing	V	Vacant
MF	Multiple Family Housing	F	Freeway
I	Industry	St	Street
C	Commercial	S	School, College
B	Business Offices	O	Other
OS	Open Space		

APPEAL

5	Very High	2	Low
4	High	1	Very Low
3	Moderate		

OBSTRUCTIONS

- (G) At grade
- (AB) Above grade
- (BG) Below grade

Judgements as to the volume of stream flow at a tunnel or ramp in a given location. Traffic counts were used to check stream flow. Where counts were not available for many cross sections, stream flow ratings as well, should be assumed.

APPEAL RATINGS

Ratings are given in the survey for each location, based on the observer's judgement for recreational use. Much subjectivity is involved and the ratings should be taken as a unit of variation in either direction.

ORGANIZATION OF INFORMATION

Information is presented on channels in the order of their occurrence. More detailed information is contained in the notes beside the black triangle at the beginning of each reach. The set of notes corresponds to that reach.

All notes are organized assuming the first reach of a channel always be considered on that channel.

The key to map and note symbols is on the next page so that it can be viewed at a glance.

Judgements as to the volume of street traffic and the difficulty of constructing a tunnel or ramp in a given location were made on the spot by the observer. Traffic counts were used to check volume estimates in some places, but these were not available for many crossings. These estimates, and therefore the ratings as well, should be assumed to have some margin for error.

APPEAL RATINGS

Ratings are given in the survey notes to indicate the aesthetic quality of a location, based on the observer's opinion of how attractive the setting was for recreational use. Much subjectivity was involved in these judgements, and the ratings should be taken as general guidelines only, subject to one unit of variation in either direction.

ORGANIZATION OF INFORMATION

Information is presented on channel maps to the extent that space permits. More detailed information is contained in the accompanying notes. The number beside the black triangle at the beginning of each reach indicates which set of notes corresponds to that reach.

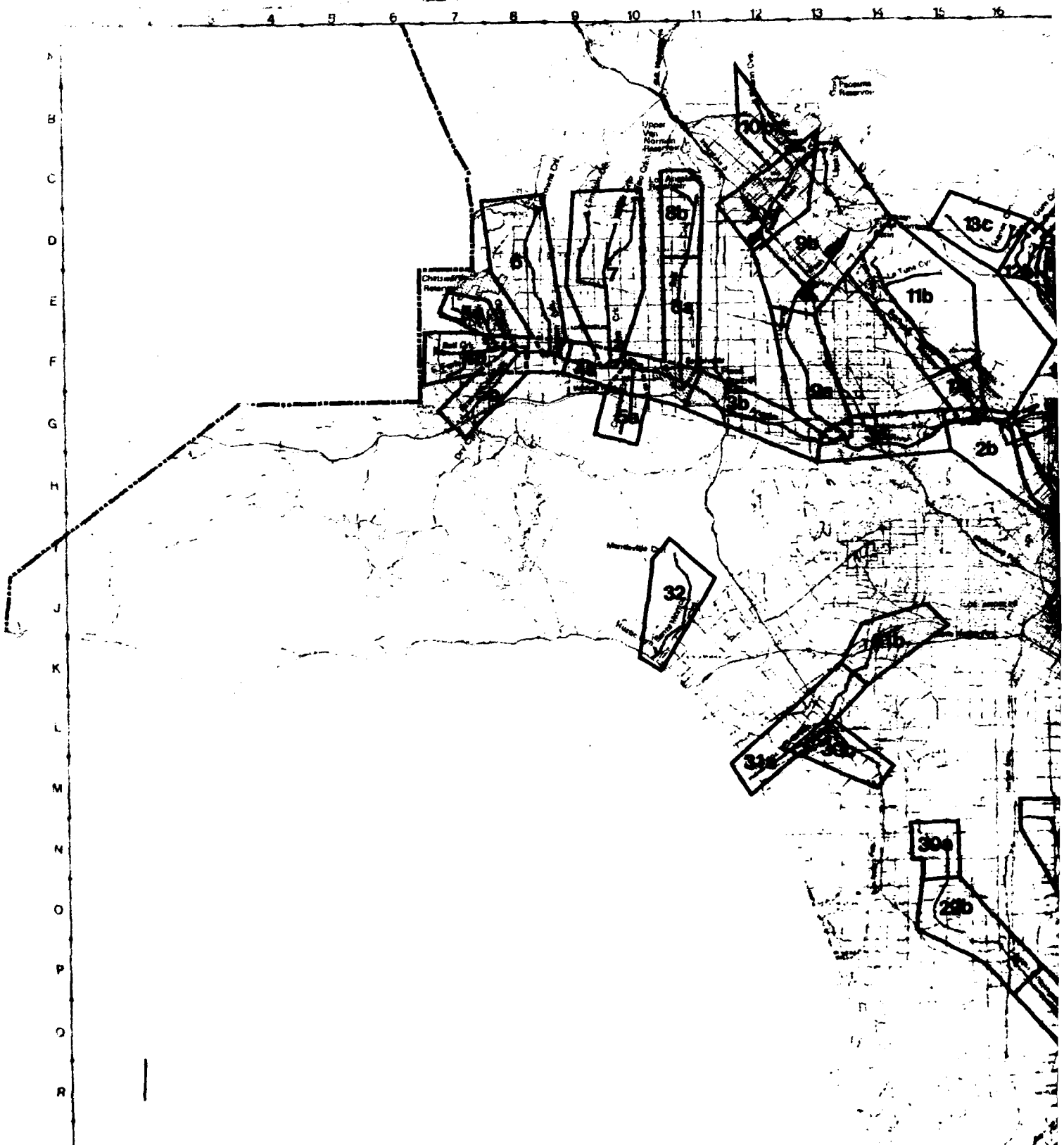
All notes are organized assuming an upstream direction of travel; i.e., the first reach of a channel always begins at the farthest downstream point being considered on that channel.

The key to map and note symbols is located on the fold-out portion of this page so that it can be viewed at the same time as the survey information.

INDEX TO CHANNELS (See Figure 8)

<u>Channel</u>	<u>Map</u>	<u>Channel</u>	<u>Map</u>
Alhambra Wash	16	Mandeville Canyon	32
Aliso Creek	7	Marshall Creek	25
Altadena	15	Mill Creek	16
Arcadia Wash	18		
Arroyo Calabasas	5	Pacoima Wash	9
Arroyo Seco	14	Paradise	15
		Pickens	13
Ballona Creek	31		
Bell	4	Rubio Wash	16
Big Dalton Wash	21	Rubio Diversion	17
Blanchard Canyon	12	Rustic Canyon	32
Blue Gum	13		
Brown's Creek	6	San Dimas Wash	22
Buena Vista	19	San Jose Creek	23-24
Bull Creek	8	San Pasqual Creek	16
Burbank Western	11	Santa Anita Wash	18
		Santa Monica Canyon	32
Caballero Creek	5	Sawpit Wash	19
Centinela Creek	30	Shields	13
Charter Oak Wash	20	Sierra Madre Wash	18
Chatsworth Creek	5	Sierra Madre Villa	17
Compton Creek	28	Snover Canyon	13
Cook's Canyon	12		
Coyote Creek	26-27	Thompson Creek	24
Dayton Creek	5	Tujunga Wash	9
Dunsmore Canyon	13		
		Verdugo Wash	2
Eagle	13		
Eaton	17	Walnut Creek	20
Emerald Wash	25	Ward	13
		Wilbur Creek	7
Fair Oaks Drain	17	Wilson	10
Flint Canyon	15	Winery	15
Gould	15		
Haines Canyon	13		
Hall's Canyon	13		
Hansen Heights	11		
Hay	15		
Laguna Dominguez	29-30		
La Tuna Canyon	11		
Limekiln Creek	7		
Little Dalton Wash	22		
Live Oak Wash	25		
Lopez Canyon	9		
Los Angeles	1-4		
Los Cerritos	27		

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**LACDA System
Recreation Study**



FIG. 8 MAP INDEX

LOS ANGELES RIVER MAP 1a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Rio Hondo River to Lake Ave. RR Br. TG 53 D4	Trap Sides RR Bottom C, LF	E	13' Paved	ROW Yes Channel No	V	?	1-9
		W	13' Paved	ROW Yes Channel No	V, L, I, SF, 2		

Survey Notes

- ① Crossings and inlets:
Rio Hondo Channel (obstructs E side only)
Long Beach Fw. (G) (obstructs W side only)
Lake Ave. RR (G)
- ② Large open area between channel and fwy. Includes bowl-shaped depression- potential rest area if shade trees added.
- ③ Single-family houses adjacent. Access road is about the same elevation as rooftops. ROW is separated from back yards by a 30-foot dirt vacant strip, but there are views down into back yards. Potential problem.
- ④ Access ramp enters invert from W side.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Lake Ave. RR Br. to Randolph St. RR Br TG 59, 51	Trap Sides RR Bottom C, LF	E	11-14' Paved ②	ROW Yes Channel Yes	OS, (power ROW), 2	2	6-18
		W	11-14' Paved ② ③	Channel Yes ROW Yes	I, St. MF, V, O, L, SF, E		

Survey Notes

- ① Crossings and inlets:
Firestone Blvd. (4' Au' Bu' street)
Patata St. RR Br. (4' Au)
Clara St. (G): Moderately busy
Florence St. (G): Busy street. Inlets in W channel wall N and S of bridge could obstruct a ramp.
Gage Av. (G): Moderately busy.
Randolph St. RR Br (G). Inlet in W channel wall N of bridge might obstruct a ramp.
- ② Road in poor condition. Needs repair
- ③ Concrete wall 3-5' Lake Av. to Florence, 1-3' Florence to Randolph St. RR
- ④ Storage lockers
- ⑤ Mobile homes
- ⑥ Single family homes from Clara to Florence. Access road is about roof level--looks down into back yards
- ⑦ Dirt road runs through power ROW to E of channel. Might also be suitable for trail
- ⑧ Steep drop off W side of road for much of this reach.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Randolph St. RR Br to District St. RR Br TG 53	Trap Sides RR Bottom C, LF	NE	10-15' Paved ②	ROW Yes Channel No	OS, (power ROW), 4, RP 5	2	17-25
		SW	Paved, not passable ③	Channel No ROW Yes	I		

Survey Notes

- ① Crossings and inlets:
Slauson Av. (G): Busy street.
Atlantic Blvd.: Bridge supports drop to 5' BG Busy street
District St. RR Br (G)
- ② Paved road narrows to 6' just N of Slauson. Total usable access width at this point is 10'. Paved road just N of Atlantic is 8' wide, usable access width 9'.
- ③ Access width on W side narrows to a 2' strip for much of the distance between Randolph and Slauson. Access width is about 5' for the first few hundred feet N of Slauson, and for most of the distance between Atlantic and District there is only about 5' between RR ties and the channel.
- ④ Power ROW between Randolph St. and Slauson has shade trees. Might make good rest area
- ⑤ RR marks separate access road from power ROW from Slauson to District St.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. District St. RR Br to Downey Rd. TG 53	Trap ② E side C, RR W side RR Bottom C, LF	NE	③	ROW Yes Channel Yes	RR, V	2	25-32
		SW	④ Not possible	Channel Yes ROW Yes	I		

Survey Notes

- ① Crossings and inlets:
Downey Rd (G): Obstructs W side only. Auto and rail bridges cross together. Drainage inlets S of bridges and truck ramp N of bridges probably preclude a ramp under the N side. Moderately busy street.
- ② Top 2' of channel is vertical.
- ③ 15' paved road most of distance. Road stops toward N end, and access is narrowed as Bandini nears the channel. RR occupies most of the access width between Bandini and the channel for about 600 ft. Just S of Downey.
- ④ 5' distance between RR ties and channel for most of reach. No usable space.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Downey Rd to 17th St TG 53 A2	Trap E side RR W side C, RR Bottom C, LF ②	N	12' Paved	ROW Yes Channel No	I	1 (odgrs) 4	32-25
		S	None ③	Channel - RW -	I		

Survey Notes

- ① Crossings and inlets:
17th St. (G): Busy street. Channel wall on W side changes from trap to vert at bridge. Ramp under bridge would probably not be possible.
- ② Low-flow channel diverges S of 17th St., continues N as two channels along sides of invert.
- ③ Access walled off, N half. Used as parking lot. Not enough room for trail in parking area
- ④ Very bad odors from meat packing plant.
- ⑤ Truck ramps enter invert from both sides just N of Downey.

LOS ANGELES RIVER MAP 1b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent use	Appeal	Photographs
6 37th St to Soto St TG 53 A2	Vert Sides C Bottom ②	NE	①	ROW Channel: Yes Channel: Yes ROW: Yes	1	1 (opans) 4	34-36
		SW	11' Dirt	Channel: Yes ROW: Yes	Gas station		

Survey Notes

- ① Crossings and inlets
37th St (G). Busy street
- ② Unpaved or covered with silt, not possible to determine. Low-flow channels on sides. Entire bottom covered with water during survey.
- ③ 20' paved road, S half of reach. N half dirt, goes under power line supports. Sufficient clearance for trail.
- ④ Very bad odors from mest packing plant.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent use	Appeal	Photographs
Soto St to 26th St TG 52 A1	Vert Sides C Bottom ②	E	12' Paved	ROW: No Channel: Yes ROW: No	1	1	35-38
		W	Not passable	Channel: Yes ROW: No	1		

Survey Notes

- ① Crossings and inlets
26th St (G). Moderately busy
- ② Same as for Reach 6
- ③ Access road is presently blocked by stored vehicles and other industrial materials that would have to be moved if road were to be used.
- ④ Industrial buildings and equipment come to edge of channel in the northern 500' of the reach. Southern half is passable (being used for parking, but there is probably room for a trail through the lot).

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent use	Appeal	Photographs
26th St to 24th St RR Br	Vert Sides C Bottom ②	E	①	ROW: No Channel: Yes ROW: No	1	1	39-41
		W	①	Channel: Yes ROW: No	1		

Survey Notes

- ① Crossings and inlets
26th St RR Br (G)
- ② Same as for Reach 6
- ③ Right-hand, 10' access width. N half being used for storage of industrial materials, no passage.
- ④ RR with paved strip for 200' N of 26th St. Northern 600' of stretch is dirt, 25' wide.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent use	Appeal	Photographs
4 24th St RR Br. to Butte St RR Br. TG 52 F1	Vert Sides steel sht Bottom C, LF ②	E	③	ROW: No Channel: Yes ROW: ④	1	1	40-44
		W	②	Channel: Yes ROW: ④	1		

Survey Notes

- ① Crossings and inlets
Washington Blvd (G). Busy street.
Butte St RR Br (G). No obstruction E side; access road ramps under.
- ② Low-flow channels at sides converge S of Butte St RR, continue N as a single channel.
- ③ E side access:
24th St RR to Washington Blvd: scrap yard filled with pipes comes to edge of channel.
Washington Blvd. to Butte St RR: small storage yard adjacent to channel 1st 100' N of Washington. Paved road (25') on adjacent industrial property, leads past storage yard to access road beyond 11' gravel rest of distance to N.
- ④ W side access:
24th St RR to Washington Blvd: 80'-wide paved strip. Not presently used, was probably parking area for abandoned industrial building to W edge.
Washington Blvd. to Butte St RR: 30' dirt strip, fenced W edge.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent use	Appeal	Photographs
Butte St RR Br. to Whittier Blvd TG 54	Vert Sides C Bottom C, LF ②	E	②	ROW: No Channel: Yes ROW: No	1, RP	1	44-47
		W	②	Channel: Yes ROW: No	1, RP		

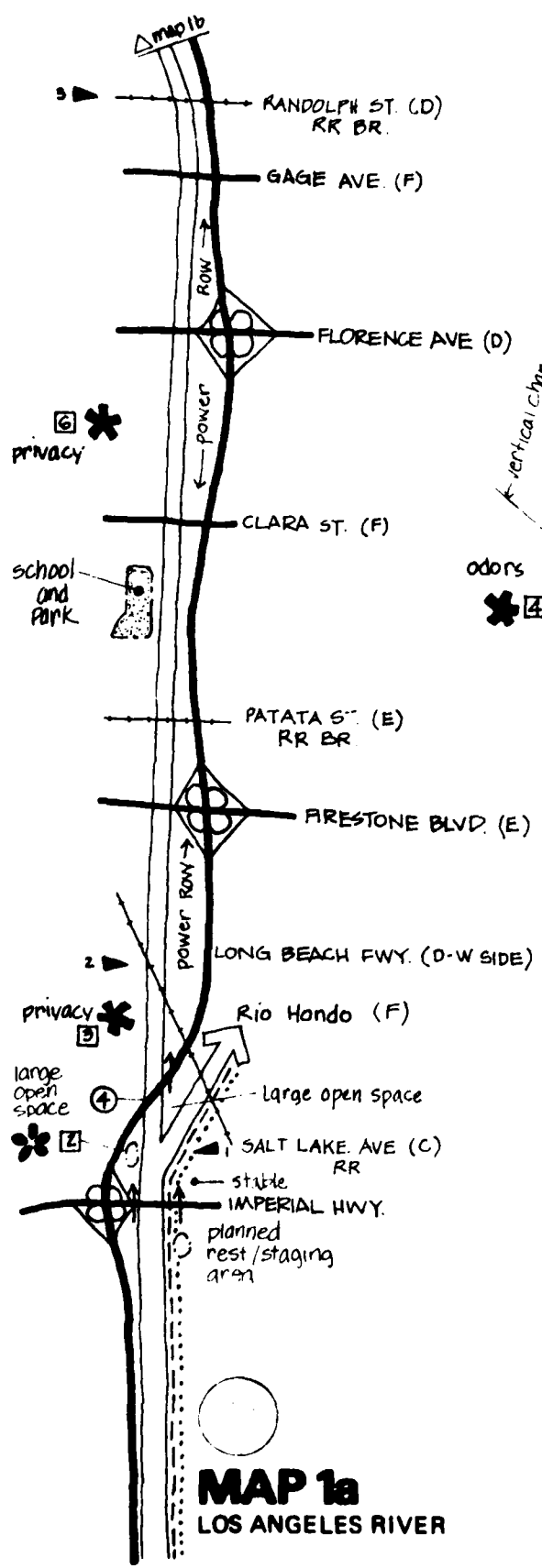
Survey Notes

- ① Crossings and inlets
Dlympic Blvd., San Bernardino Fwy., 7th St., Whittier Blvd. ① These bridges are well above grade, and ramp down several hundred feet to the E and W. ② The San Bernardino and 7th St. bridges do not obstruct access on the E side. There is 6' of usable access width under the freeway, and 7' under 7th St. Access is obstructed at other bridge crossings because of insufficient width between rails and bridge abutments. ③ In order to cross over these streets, or cross under the bridges on the E side of the channel ROW, it would be necessary to cross several sets of tracks two times. ④ All bridges carry heavy traffic. ⑤ There is an access ramp to the channel bottom from 6th St. which enters under the Whittier Bridge on the W side. A ramp in the channel will under the W side of the bridge is not possible.
- ② E side access:
Butte St RR to Olympic: road access halfway to N (20'), dirt. Rail yards begin halfway. 16' usable access width (gravel) from channel to ties. Usable width narrows to 4' in two places (power line supports). Steep slope retaining wall probably necessary for N half. Ramp to San Bernardino Fwy. 6' usable access width from channel to ties (gravel). Obstructions in two places (power support, signal frame, block arrest).
San Bernardino Fwy. to Whittier: 20' usable access width from channel to ties (dirt and gravel). Usable width narrows to 4' in 2 places (power supports).
- ③ W side access:
Butte St RR to Olympic: 14' usable access width from channel to ties (dirt and gravel). Obstructed in 2 places by power supports. Supports straddle fence, 9' from support pad to fence, 5' usable from support to ties. (See note 4 and photo 49). Steep slope retaining wall would be necessary most of length.
Olympic to San Bernardino Fwy.: not possible. Insufficient usable space between rails and side of channel.
San Bernardino Fwy. to Whittier: 20' usable access width from channel to ties (dirt and gravel). Partially obstructed in numerous places by power line supports and rail equipment. Supports straddle fence, 10' from support pad to fence. (See note 4). Steep slope retaining wall would be necessary most of length.

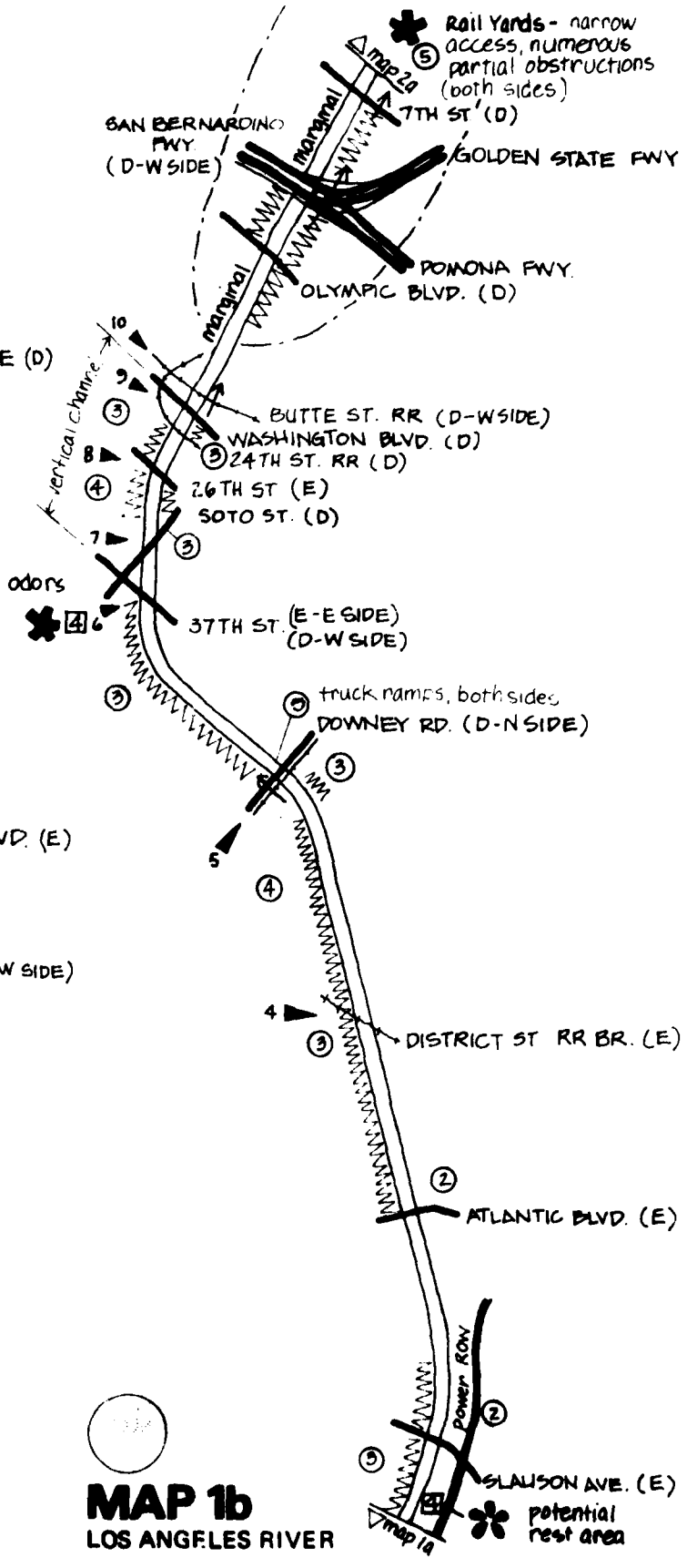


Power line supports straddle the side of the channel in many places. A single lane cycle path could sometimes go under these supports, and in some places this is the only access space available along the channel for a trail. Clearances would be minimal, however, and such an arrangement would not be desirable. The vertical clearance usable widths under supports between Butte St RR and Olympic W side). The amount of clearance on other spans will vary somewhat with the size, placement, and geometry of the support. Ramping down between the support pad will increase usable width one foot for each one foot of drop, to a maximum equal to the distance from the fence to the pad within the ROW. This distance is 5' in the access description.

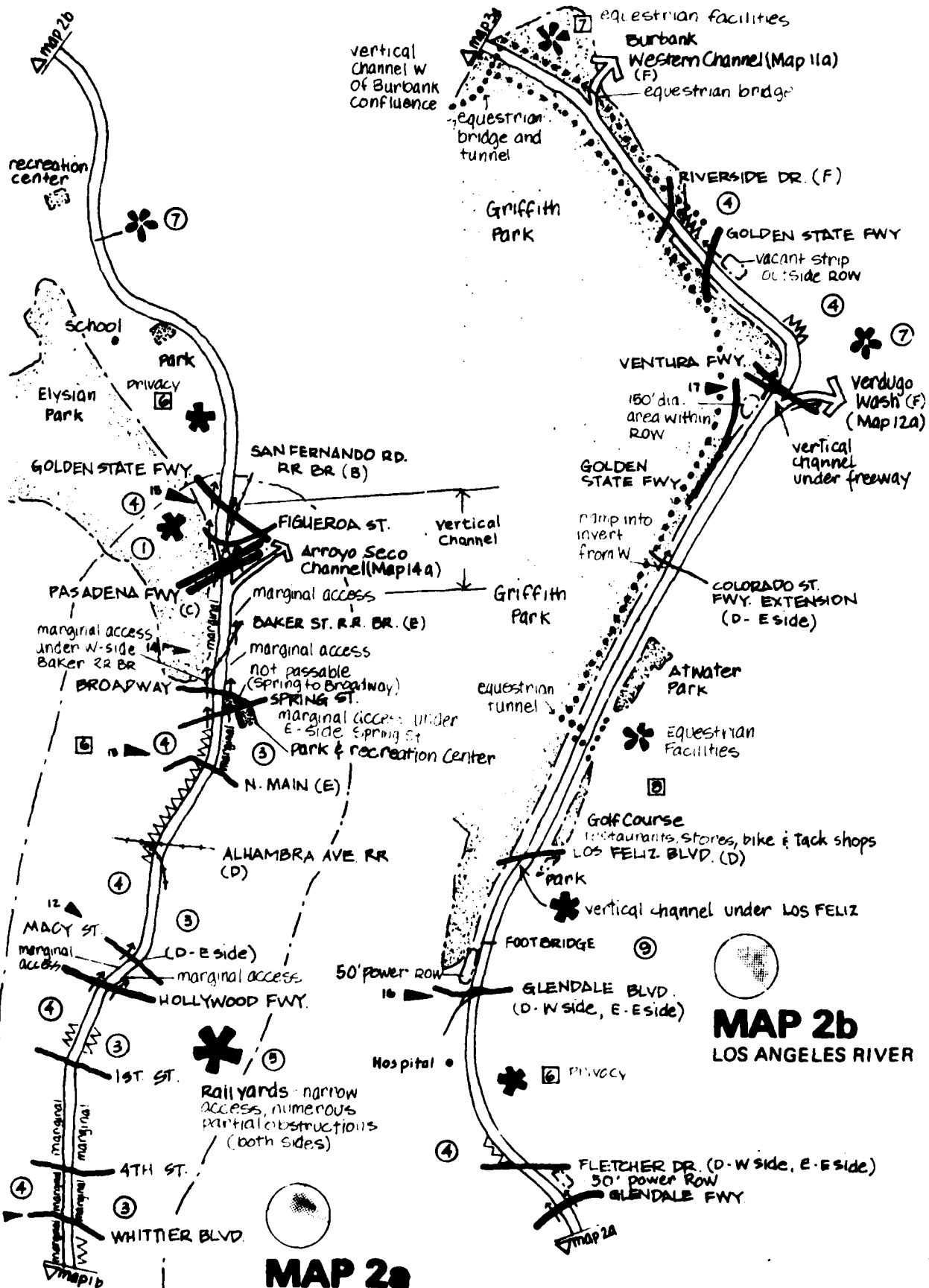
It may not be feasible to locate trails or other facilities in the rail yards, even where minimal clearances exist. Permission may be difficult to obtain from the railroads. Also, there are numerous secluded spaces among the bridge supports which are used by transients and the like. Such people were often encountered during the survey, and they might discourage use of trails in the rail yards.



MAP 1a
LOS ANGELES RIVER



MAP 1b
LOS ANGELES RIVER



MAP 2a
LOS ANGELES RIVER A1-10

MAP 2b
LOS ANGELES RIVER

LOS ANGELES RIVER MAP 2a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
11. Whittier Blvd to Macy St TG 44	Trap ② Sides C Bottom C, LF	E ③	④	ROW No Channel Yes	RR	1	61-70
		W ④	④	Channel Yes ROW No	RR		

Survey Notes

- ① Crossings and inlets
4th St., 1st St., Hollywood Hwy., Macy St. ② Same as 1a, Reach 10. ③ The Hollywood Hwy bridge does not obstruct access on either side. Access tunnels are long and dark, however, with columns on the sides that can't be seen behind; not good for trail use. The Macy St. bridge does not obstruct access on the W side; tunnel there is suitable for trail use. Access is obstructed at the other bridge crossings because of insufficient width between rails and bridge abutments. ④ and ⑤ Same as Reach 10. ⑥ Bridge supports at Macy St. drop considerably below grade on the channel walls, and might make construction of a ramp difficult. Ramp could go through bridge supports, however, remaining at or slightly above grade.
- ② Top 4-15' of channel is vertical.
- ③ E side access: 7'-15' of usable access width (dirt and gravel) from channel to RR ties, except for obstructions. Obstructed numerous places by power line supports (no access underneath) and rail equipment. 5' berm drain along channel side. Narrowest usable access width from Whittier to 1st is 5' (4 places), from 1st to Hollywood Hwy., 3'; and from the Hwy. to Macy, 7'.
- ④ W side access: 12'-15' of usable access width (dirt and gravel) from channel to RR ties, except for obstructions. Obstructed numerous places by power line supports and rail equipment. Most supports straddle fence; 8-12' from fence to support pad, 1'-5' usable width from support to ties (see note 4, Reach 10). Narrowest usable access width from Whittier to 4th is 6', from 4th to 1st, 5', from 1st to the Hollywood Hwy., 0' (power support with no access underneath); and from the Hwy. to Macy, 7'.
- ⑤ Same as note 5, Reach 10.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
12. Macy St. to N Main St.	Trap ② Sides C Bottom C, LF	E ③	④	ROW No Channel Yes	RR ⑤	2	70-75
		W ④	④	Channel Yes ROW No	RR ⑤		

Survey Notes

- ① Crossings
Alhambra Ave. RR Bridges (2' AG): Ramping down would be more difficult, because the top 4' of the channel is vertical. Storm drain inlet in E wall under N Bridge might also interfere with a ramp.
N Main St. (G): Busy street.
- ② Top 8-12' of channel is vertical.
- ③ E side access
Macy St. to RR bridges: 20' usable access width from channel to ties (dirt). 5' berm drain along channel side. Power line support restricts usable access to 7' at one point. Access passes under 3 other power line supports (no obstruction).
Between RR bridges: 20'+, dirt.
RR bridges to N Main: 10' of usable width from fence to bank; more if retaining wall were used (dirt and 3' sidewalk). Passes under three power line supports, one of which is set diagonally to the path, requiring a sharp bend in the trail.
- ④ W side access
Macy St. to RR bridges: 12' of usable access width from channel to ties (dirt). 5' berm drain along channel side. Access goes under 4 power line supports (no obstruction).
RR bridges: Access is obstructed for about 250' in the area of the bridges by rails and rail equipment.
RR bridges to N Main: No access. Space beside channel is used for parking.
- ⑤ Same as note 5, Reach 10.
- ⑥ Large amount of industry both sides of channel. Good potential for bicycle transportation.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
13. N Main St. to Baker St. RR Br. TG 44 F	Trap ② Sides C Bottom C, LF	E ③	④	ROW No Channel Yes	RR	2	75-85
		W ④	④	Channel Yes ROW No	RR		

Survey Notes

- ① Crossings
Spring St.: Well above grade, ramps down a long distance to the E and W. Does not obstruct W side. Rail equipment obstructs most of access space under Spring St. on E side, about 5' clearance is available around obstructions.
Broadway: Well above grade. Does not obstruct access on either side.
Baker St. RR Br.: Marginal access underneath on W side (7' clearance). No obstruction on E side.
- ② Top 5-15' of channel is vertical.
- ③ E side access: 6'-10' of usable access width (dirt and gravel) from channel to RR ties, except for obstructions. Obstructed or partially obstructed in numerous places by power line supports and rail equipment. Narrowest usable access width from N Main to Spring is 5', from Spring to Broadway, 0' (obstructed by power support and large concrete blocks), and from Broadway to the Baker St. RR, 7'.
- ④ W side access
N Main to Spring: 7' usable access width from channel to RR ties (dirt and gravel) except where obstructed. Not passable in one place (power line support obstruction).
Spring to Broadway: 20' usable access width from channel to telephone poles (dirt). Narrowest usable access width is 7' (power support obstruction).
Broadway to Baker St. RR: 25'+ usable access width from channel to telephone poles (dirt). Narrowest usable access width is 12' (power support obstruction).
- ⑤ Same as note 5, Reach 10.
- ⑥ Same as note 6, Reach 12.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
14. Baker St. RR Br. to Golden State Hwy. TG 35 F5	② Sides C Bottom C, LF	E ③	④	ROW Channel ⑤	RR, St	1	85-93
		W ④	④	Channel Yes ROW No	RR, St		

Survey Notes

- ① Crossings
Pasadena Hwy.: W end has sufficient clearance for access underneath, but is obstructed by rails from San Fernando RR Br., which pass under the W end of the Pasadena Hwy. Br. Access on the E side is not obstructed by the freeway bridge, but is obstructed immediately S of the bridge by the Arroyo Seco channel (see 3).
San Fernando Rd. RR Br.: (G) Tracks obstruct access on W side under Pasadena Hwy. Br., and on E side under Figueroa St. Br.
Figueroa St. (AG): Access is not obstructed on the W side, minimum clearance is about 10'. The area under the bridge, however, has numerous large columns and dark cavernous spaces. These sheltered areas are frequented by transients. Potential safety problems. Access is obstructed under the E end of the bridge by rails leading to the San Fernando Rd. RR bridge.
- ② Channel is vertical from just S of the Pasadena Hwy. to just N of the Golden State Hwy.
- ③ E side access
Baker St. RR to Pasadena Hwy.: Access is obstructed immediately N of the RR by a power line support. 5' access width (with 8' clearance) under the support. 4' clearance, support to fence. 10' usable access width (dirt) from fence to RR ties for S half of reach. N half of reach (N of second power line support) has 15' or more of usable access until the Arroyo Seco channel. The channel inlet obstructs access just S of the Pasadena Hwy. Br. RR Br. crosses inlet, but ROW access depends on inlet.
Pasadena Hwy. to Figueroa St.: 20' usable access fence to ties (dirt and gravel).
Figueroa St. to Golden State Hwy.: 13' access road (dirt).
- ④ W side access
Baker St. RR to Pasadena Hwy.: 20'-30' usable access width from fence to ties (dirt). Partially obstructed 3 places by power line supports (8' usable width, support to ties, 7' support to fence; no access under supports).
Pasadena Hwy. to Figueroa St.: Paved sidewalks from channel fence to side of slope. Access width is constricted to 5' at one point by a concrete abutment.
Figueroa St. to Golden State Hwy.: 20' (dirt) from fence to slope. The slope W of the access area extends up to the adjacent street. There are numerous large columns set in the slope that support the street, which overhangs the access area for much of this distance. The columns and overhang provide sheltered spaces which are frequented by transients. Potential safety problem.
- ⑤ Same as Reach 10.
- ⑥ ROW is fenced only from Figueroa St. to the Golden State Hwy. on the E side.

LOS ANGELES RIVER MAP 2b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
15. Golden State Fwy to Glendale Blvd TC 44	Trap Sides ② Bottom U	E	10' paved ③	ROW Yes Channel No	RR, St. I, W, SF ⑥	3 ⑦	93-99
		W	10'-15' paved ④	Channel No ROW Yes ⑤	SF ⑧, I, F		

Survey Notes

- Crossings and inlets:
Glendale Fwy (AG) No obstruction either side.
Fletcher Dr. (G), Glendale Blvd (G) Ramps used to cross under these bridges would be longer than normal; there is no W side ROW access N of Fletcher Dr. for the first 200', and access roads lead to the Glendale Fwy from the W on both sides of the main bridge. Both carry heavy traffic.
- Concrete, except in the following places:
E side: RR from 600' N of Golden State Fwy. to opposite Birdale St. and from Fletcher Dr. to Glendale Blvd.
W side: RR from 600' N of Golden State Fwy. to Glendale Fwy.
- E side access:
Access road is in moderately good condition. Some bad spots. Drifted dirt covers much of road.
Golden State Fwy. to Glendale Fwy.: a. Access passes under power line supports. No obstruction. b. Numerous dips in road because of shallow drain inlets. These would need to be bridged over for a trail. c. Access road enters rail yard approximately opposite Dallas St. and follows paved road inside yard for about 800', then drops back down into channel ROW for remainder of distance.
Glendale Fwy. to Fletcher Dr. 50' vacant strip between access road and street to N.
- W side access:
Moderately good condition. Some bad spots, especially from Glendale Fwy. to Fletcher.
Golden State Fwy. to Glendale Fwy. Same as 3b above.
Fletcher Dr. to Glendale Blvd. Same as 3a above. No access road first 200' N of Fletcher. Crystal St. is adjacent to channel for this distance.
- Numerous breaks, holes in fence from Golden State Fwy. to Glendale Fwy. (W side).
- Possible adjacent use conflicts:
E side: SF and RF housing from Petite Ct. (1/4 mile N of Fletcher) to Glendale Blvd. Lot of broken glass, rubbish in access road behind apartment houses near Acresite St. Single family housing level with ROW, separated by chain link and shrubs.
W side: SF housing from Golden State Fwy. to Riverdale St. (3/4 mile to N). Back yards same elevation to 1' higher than access road, separated mostly by chain link, wood slat fences, vines, and shrubs.
- At the time of the survey, the river bottom in this reach had flowing water and a full growth of lush vegetation, as well as rocks, boulders, and islands. The scenic appearance of the river bottom considerably softened the less aesthetic effects of the concrete channel walls and of adjacent areas with little visual appeal such as the rail yards. The sound of the flowing water also added appeal, though this was reduced somewhat by freeway noise.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
16. Glendale Blvd to Ventura Fwy. T. 15, 25	Trap Sides ③ Bottom U	E	10'-15' paved ④	ROW Yes Channel No ②	SF, OS, C. I, O ⑥	4	99-103
		W	9-15' paved ⑤	Channel No ② ROW Yes ③	OS, F ⑥	⑦	

Survey Notes

- Crossings and inlets:
Los Feliz Blvd. heavy traffic.
Colorado St. Fwy. Ext. obstructs E side only (3' AG, E side). Tunnel under W side (AG).
Ventura Fwy (AG) Does not obstruct access.
Verdugo Wash. Interrupts access on E side at Ventura Fwy. bridge. 200' span at confluence. Narrows to 80' at San Fernando Rd. crossing 700' to E.
- Vertical channel with fenced sides under Los Feliz bridge and from 1/8 mile S of Ventura Fwy. to Ventura Fwy.
- Rip-rap, except in the following places:
E side: Concrete from 3/8 mile S of Ventura Fwy. to Ventura Fwy.
W side: Concrete from Glendale Blvd. to Los Feliz and from Colorado Fwy. Ext. to Ventura Fwy.
- E side access: Access road passes under power line supports from Los Feliz to Ventura Fwy. No obstruction except at one pole between Colorado and Ventura Fwy. pole straddles ROW fence, restricts access width to 6'. Paved access road ends 1/8 mile S of Ventura Fwy.; dirt to N of this point.
- W side access: Road is in poor condition in a few places, especially from Glendale Blvd. to Los Feliz. Dirt last 1/4 mile S of Ventura Fwy.
- Adjacent uses:
E side:
Glendale Blvd.-Los Feliz: SF houses, level with ROW, separated by chain link fence, vines, shrubs. Small park S of Los Feliz.
Good potential rest stop.
Los Feliz Colorado Fwy. Ext.: Golf course, private equestrian facilities, park, city maintenance yard, water reclamation plant, light industry.
Colorado Fwy. Ext. Ventura Fwy.: Light industry office complex.
W side: 60' vacant strip between access road and ROW fence from Glendale Blvd. to 1/4 mile N. Planted open strip separates ROW from freeway for most of reach.
- From 1/4 mile N of Reach 15: Views of Griffith Park hills and Verdugo Mountains to N.
- Large private equestrian complex borders channel ROW from Rigall St. to Atwater Park (N of Los Feliz). There are several dirt equestrian ramps into the invert between Los Feliz and Colorado Fwy. Ext. and equestrians presently ride in the invert. An equestrian tunnel crosses from the channel to Griffith Park under the fwy.
- Footbridge from Vanoy St. into Griffith Park.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
17. Ventura Fwy to Ventura Fwy TC 25, 24	Trap Sides ③ Bottom U	E/W	④	ROW Yes Channel ⑥	I, St. OS, V, W, SF, U, ⑦	⑧	104-107
		W/S	④	Channel ⑥ ROW Yes	F, St. OS		

Survey Notes

- Crossings and inlets:
The Burbank Eastern Channel and an ROW-wide surface drain inlet cause breaks in the W channel wall near Flower St. Neither is a significant obstruction (see 4).
Golden State Fwy (AG) Does not obstruct access on either side.
A 150' wide, 4' deep culvert interrupts the access road on the N side about 500' E of Riverside Dr. Not a serious obstruction.
Riverside Dr. (W) Moderately busy.
Burbank Western. Interrupts access on W side. Crossed by equestrian bridge.
Ventura Fwy (3 AG) obstructs both sides. Access road from W of the Fwy. continues along the fwy. toward Griffith Park. An equestrian tunnel under the fwy. a short distance W of the fwy. crossing connects equestrian trails E and W of the fwy. on the W side.
- E side is vertical from Verdugo Wash. to approximately Burbank Eastern inlet. W side if trapezoidal for this distance except for a short length N of Ventura. Channel is trapezoidal from Burbank E. inlet to Burbank Western confluence, vertical W of this point.
- Rip-rap from Burbank Eastern inlet to 400' W of Golden State Fwy. and from Riverside to Burbank Western confluence. Concrete otherwise.
- E/W side access: 10' dirt road from Verdugo Wash. to Burbank E. inlet. Interrupted for 250' distance by Burbank Eastern and a smaller wash inlet. Not a major obstruction. There is a large paved area between the ROW and Flower Street that would carry a trail across the interrupted distance. Trail would ramp down through the smaller inlet. 8-12' paved W of this point until interrupted by 150' culvert between Golden State Fwy. and Riverside (4' deep). Not a major obstruction; can be rammed down through. 12' paved from culvert to 200' W of Riverside. 12' dirt from this point to Burbank Western confluence and from confluence to Ventura Fwy. (equestrian trail).
- W side access: 10' dirt access to 200' N of Verdugo Fwy. (E end). 12-15' paved from this point to 200' W of Riverside Dr. 15' dirt from Riverside to 400' E of Ventura Fwy. (equestrian trail). Large open dirt space 90' wide remainder of distance to Ventura Fwy.
- Channel sides fenced along vertical sections.
- There are numerous equestrian facilities along the N side of the ROW from Riverside Drive to Ventura Fwy. (W end). There are bridge piers along both sides of the channel, dirt equestrian ramps into the fwy., equestrian bridges across Burbank Western and across the Los Angeles River at Mariposa St., and a tunnel under the Ventura Fwy. S of Mariposa St. connecting to trails in Griffith Park. Much of the reach receives extensive equestrian use.
- Appeal: 4 from Verdugo Wash. to Burbank Eastern, 3 from Burbank E. to Riverside, 2 W of Riverside.

LOS ANGELES RIVER MAP 3a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
18. Ventura Fwy. to Barham Blvd TG 24 D3 to B4	Vert Sides C Bottom ②	N	③	ROW Channel Yes	F, OS, St, B/E	2	108-113
		S	12' dirt ④	Channel Yes ROW Yes	OS, B, C		

Survey Notes

- ① Crossings and inlets:
Small inlet (18' wide, 6' deep) interrupts access on S side at Buena Vista Barham Blvd. (10' AG): Obstructs S side only 4' access width on S side under bridge. Busy street.
- ② Bottom has 20' concrete paved strip along each side, unpaved in center, to approximately Buena Vista. Concrete with low-flow channel from Buena Vista to Barham.
- ③ N side access: 15' equestrian trail from Ventura Fwy. (enters through tunnel under Fwy.) to Catalina St., 12' dirt road from Catalina to Burbank Studios. No access permitted through Burbank Studio lot; access area is used for parking.
- ④ 50-100' dirt open area from S access road to ROW fence. Becomes steep slope toward Barham, but flat and usable farther to E.
- ⑤ Equestrian trail on N side has only a rail at ROW edge. Heavy shrubs along N ROW from Catalina to Burbank Studios.
- ⑥ Buena Vista Park is adjacent on N side from Buena Vista to Catalina (OS). Burbank Studios (B) adjacent E of Barham on N side.
- ⑦ Good views of hills to S, distant mountains to NE. Freeway noise.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
19. Barham Blvd. to Lankershim Blvd. TG 24 B4 to 23 F4	Vert Sides C Bottom C, LF	N	②	ROW Channel No	O 2 SF, C	2	115-118
		S	③	Channel Yes ROW No	O 3		

Survey Notes

- ① Crossings:
Lankershim Blvd./Cahuenga Blvd. (G): Streets intersect over channel, cover channel for 150' on N side, 100' on S side. Heavy traffic.
- ② E side access area is used for parking for first 450' W of Barham. Past this point the Lakeside Country Club comes to the edge of the channel; no ROW access is permitted through the club, but the space is unobstructed.
- ③ 15' dirt road first half of reach. W half of reach is used by Universal Studios to edge of channel. Equipment is stored on access area for part of distance, remainder used for parking.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
20. Lankershim Blvd. to Radford St. TG 23 F4 to C4	Vert Sides C Bottom C, LF	N	② dirt	ROW Channel No ④	SF ⑤, OS, ME, C, St	2	119-132
		S	③	Channel Yes ROW No ④	SF ⑤, OS, ME, St		

Survey Notes

- ① Crossings and inlets:
Hollywood Fwy. (G)
Vineland Av. (5' AG): Moderately busy.
Tujunga Av. (G): Moderately busy.
Tujunga Wash Inlet obstructs N side access.
Colfax Av. (AG): Does not obstruct either side.
Radford St. (G): Light traffic.
- ② 10' access width from Lankershim to Fwy. and from Tujunga to Colfax. 20' or wider otherwise.
- ③ 11' paved from Lankershim to Fwy.; 10' dirt from Fwy. to Vineland; 20' dirt, Vineland to Tujunga. 11' paved plus 8' dirt, Tujunga to Colfax; 20' dirt Colfax to Radford.
- ④ ROW fenced only between Lankershim and Hollywood Fwy.
- ⑤ Scattered SF housing, both sides, along much of reach. Houses are generally set well back from the channel and separated by 10'-20' of grade change and steep embankments. There are a few fences and heavy shrubs in some places between houses and channel.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
21. Radford St. to Coldwater Canyon Av. TG 23 C4 to A4	Vert Sides C Bottom C	N	15'-20' dirt	ROW Channel No	St	2	133-139
		S	15'-20' dirt	Channel Yes ROW No	St, C ②		

Survey Notes

- ① Crossings and inlets:
Laurel Canyon Blvd. (G): Very busy street. Inlet enters under S side of bridge; no tunnel possible on S side.
Whittsett Av. (G): Moderately busy.
Coldwater Canyon Av. (G): Busy street.
- ② Commercial strip separated from channel ROW by small street. Includes deli, restaurants, savings and loan, ice cream shop, small shopping center. Good opportunity for trail-oriented commercial facilities.

LOS ANGELES RIVER MAP 3b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
22 Colwater Cyn to Moorpark St (6.21-23)	Vert. Sides C Bottom C	N	12' dirt rd.	ROW Channel: Yes Channel: Yes	MF, SF SF, SF	3	140-147
		S	12' dirt rd.	Channel: Yes ROW: No	SF		

Survey Notes

- Crossings and inlets:
Fulton Av. (G): Not busy.
Moorpark St. (G): Moderately busy. Crosses at a shallow angle, and covers the channel for about 160'. Probably too long a distance for a tunnel.
- Access space on N side between Fulton and Moorpark is obstructed by a number of trees and shrubs that would require removal if access were to be used.
- On the north side, 4'-6" higher than ROW, separated by shrubs.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
23 Moorpark St to Ventura Fwy (6.24-25)	Vert. Sides C Bottom C	N	12' ②	ROW: Yes Channel: Yes	MF, SF ② C, F	3	147-156
		S	12' dirt rd.	Channel: Yes ROW: ①	MF, SF		

Survey Notes

- Crossings and inlets:
Woodman Av. (G): Busy street. Tunnel not possible on either side because of inlets E of the bridge.
Hazeltime Av. (G): Busy street. Tunnel under street is not possible on either side because of inlets just E of the bridge.
Ventura Fwy. (AG): The freeway itself does not obstruct access on either side. The space under the freeway on the N side, however, is used for RV storage (commercial), and is not passable. An access ramp to the invert obstructs access under the fwy on the N side (15' wide).
- Fenced from Woodman to Colbath (poor condition). Dirt otherwise. Access narrows to 7' at one point. 2' retaining wall needed last 100' E of Hazeltime (sloping side).
- Wall from Moorpark to Woodman. Short length of fence E of Hazeltime. Shrubs otherwise.
- 1/2 housing, N side, 1/2 distance from Moorpark to Woodman. 6'-8" higher than ROW, separated by chain link and wood fences, shrubs.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
24 Ventura Fwy to Van Nuys Blvd (6.22-23)	Vert. Sides C Bottom C	N	10-12' dirt	ROW: ② Channel: Yes	B, SF, St St	3	156-163
		S	11'-15' dirt	Channel: Yes ROW: No	F, C		

Survey Notes

- Crossings and inlets:
Van Nuys Blvd. (G): Busy street. Tunnel under St. on S side would be difficult because of inlet near bridge.
Hazeltime Av. (G): Moderately busy street. No tunnel possible on S side because of inlet at bridge.
Large pipes cross channel at North St. Obstruct N side only. Not a major problem. Low-traffic street is adjacent to channel on N side (15' wide). Busy street.
- Fenced adjacent to Sunbelt Bldg. and along SF from Van Nuys to Cedros. Large shrubs otherwise.
- Large shrubs from fence to be removed. Fenced otherwise.
- Adjacent uses: N side: Sunbelt Bldg. (B) W of Ventura Fwy. SF from Sunbelt Bldg. to Van Nuys, 6'-10" higher than ROW, separated by shrubs only. Fence needed. SF from Van Nuys to Cedros except B at Van Nuys, 8" higher than ROW, separated by chain link fence.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
25 Sepulveda Blvd to San Diego Fwy (6.22-24)	Vert. Sides C Bottom C	N	20-25' dirt	ROW: Yes Channel: Yes	OS	3	164
		S	No access	Channel: Yes ROW: --	②		

Survey Notes

- Crossings and inlets:
San Diego Fwy. Fwy. and access road obstruct ROW for about 150'. Channel surfaces for short distance between the two, but is inaccessible.
- San Diego Blvd. to San Diego Fwy.
Side: obstructed by parking lots, miniature golf course. Access ramp into invert 10' W of Sepulveda.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
26 San Diego Fwy to Sepulveda Blvd (6.24-25)	Vert. Sides C Bottom C	N	②	ROW: Yes Channel: No	OS	3	
		S	②	Channel: No ROW: Yes	SF		

Survey Notes

- Crossings and inlets:
Rebreed Dam: A series of 10 x 10' x 10' weirs connects the channel E of the dam to that W of the dam, riders using the channel must climb to weirs to pass through these spaces. Alternatively, the trail could ramp up the E face of the dam to the dam road.
- No access just above the channel. Large open fields on both sides.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
27 Sepulveda Dam to Robbers Blvd (6.22-23)	Trap Sides C Bottom C	N	15' dirt	ROW: No Channel: No	OS	2	
		S	5' dirt ②	Channel: No ROW: No	OS		

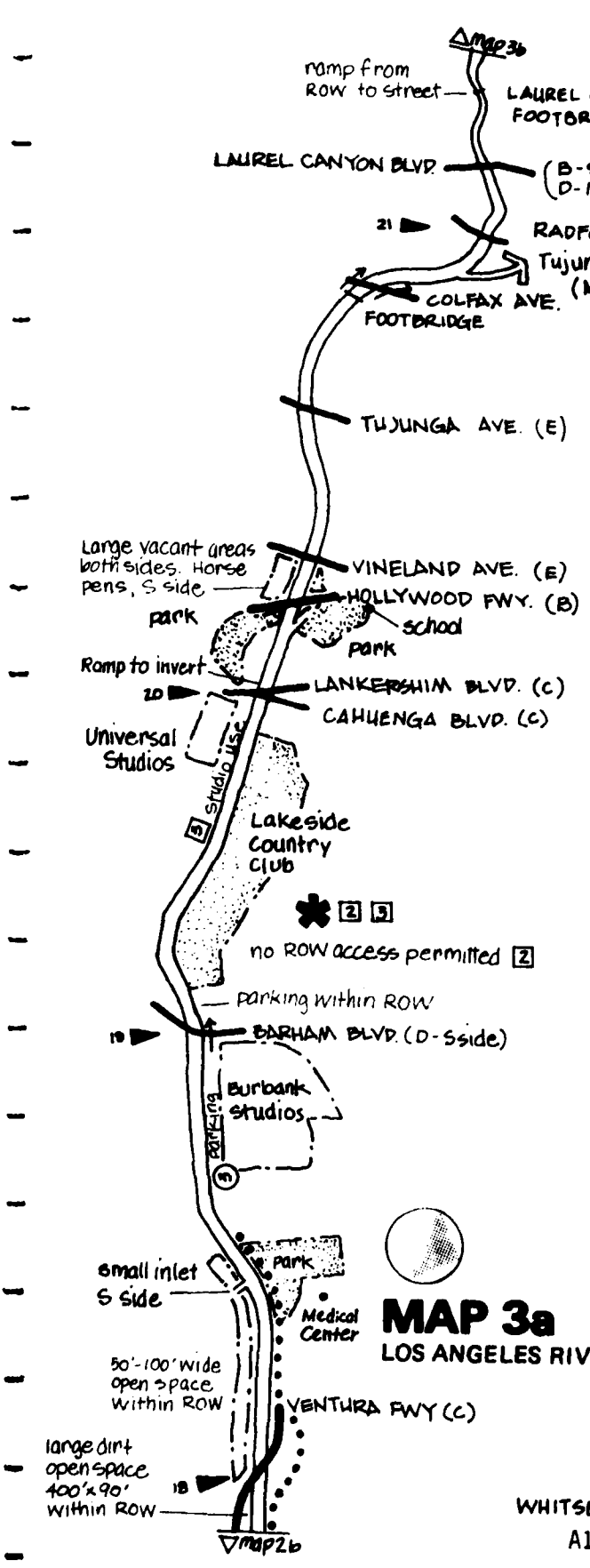
Survey Notes

- Crossings and inlets:
Channels enter from N and E 560' W of dam. Obstruct both sides.
Robbers Blvd. (G): Moderately busy street. Bike path crosses on bridge.
- Very bad condition.

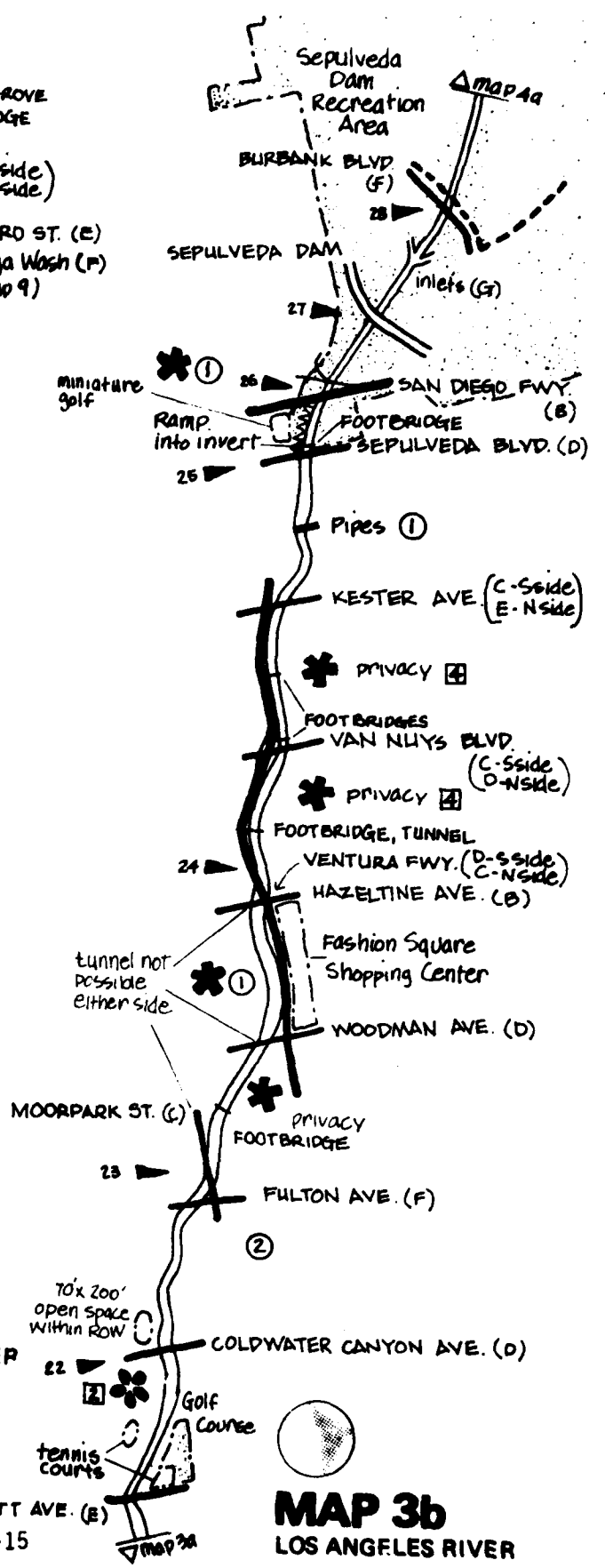
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
28 Robbers Blvd to AP Bldg (6.14-15)	Trap Sides ② Bottom C	N	12' dirt rd. 30' access	ROW: No Channel: No	OS	2	165-168
		S	11' dirt rd. 10' access	Channel: No ROW: ③	OS		

Survey Notes

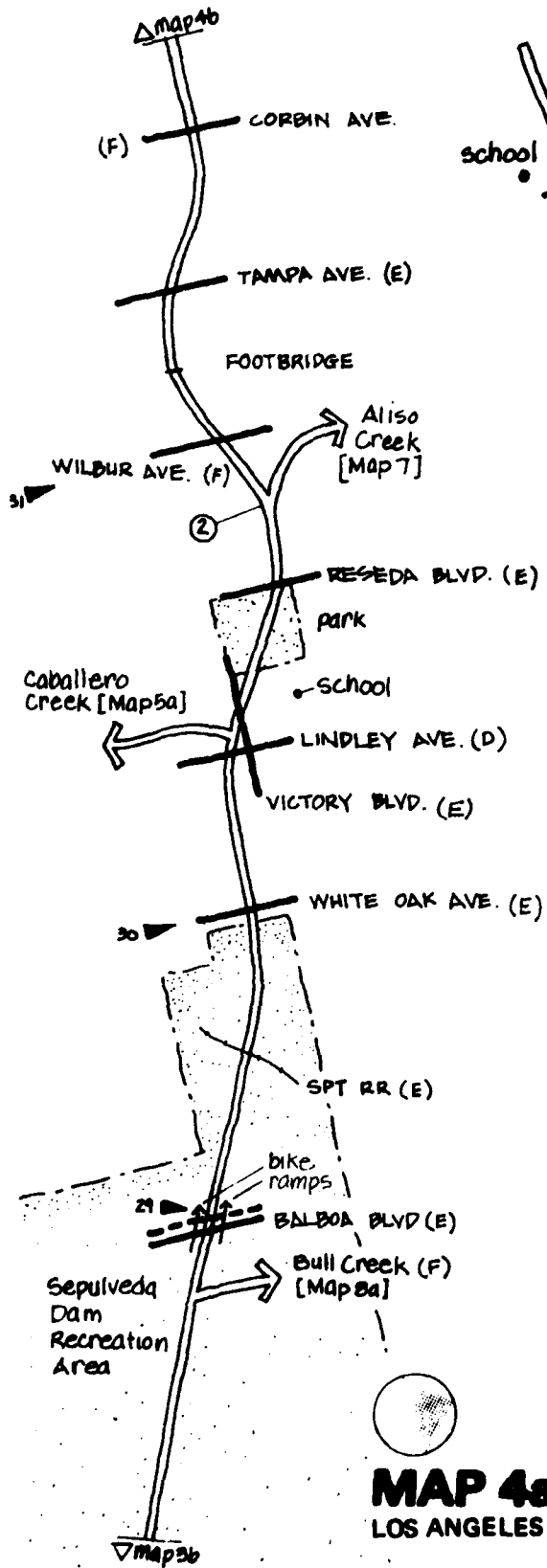
- Crossings and inlets:
AP Bldg. Channel inlet obstructs N side.
AP Bldg. (G): There are existing bike ramps under the bridge on both sides. Heavy traffic.
AP Bldg. (G):
- Sides dirt to be fixed, 40' from Ballona to AP Bldg.
- Partially fenced.



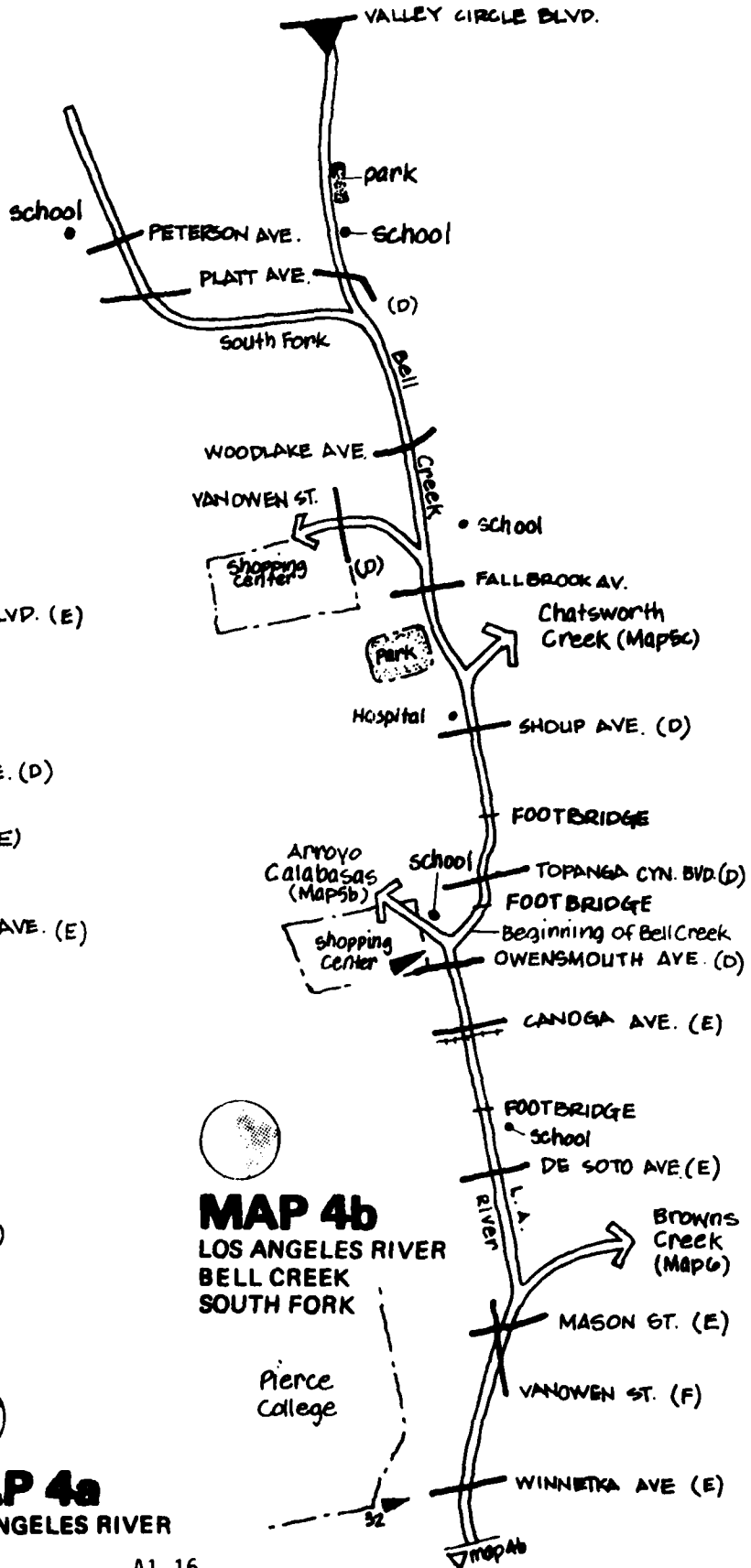
MAP 3a
LOS ANGELES RIVER



MAP 3b
LOS ANGELES RIVER



A1-16



LOS ANGELES RIVER MAP 4a, 4b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
29. SPT RR Br. to White Oak Ave TG 14 E5	Trap Sides RR Bottom C, LF	N	11' paved	ROW Channel	Yes No	OS	168-170
		S	11' paved	Channel ROW	No Yes		

Survey Notes

- ① Crossings and inlets:
White Oak Ave. (G): Moderately busy

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
30. White Oak Ave. to Wilbur Ave. TG 14 D5 to B5	Trap Sides RR Bottom C, LF	N	10' paved ③	ROW Channel	Yes No	SF ④, L, S, OS	171-179
		S	10' paved ③	Channel ROW	No Yes		

Survey Notes

- ① Crossings and inlets:
White Oak Ave. (G): Moderately busy.
Lindley Ave. (G): Moderately busy.
Caballero Creek Inlet blocks S side access.
Victory Blvd. (G): Busy street.
Reseda Blvd. (G): Busy street.
Aliso Creek Inlet blocks S side access.
Wilbur Ave. (G): Moderately busy.
- ② Width of L.A. River narrows from approximately 100' to 50'.
- ③ No paved access road between Victory and Reseda; park extends to edge of channel, no obstructions along edge of channel.
- ④ Single family homes in this reach are at same level as access road, usually screened by shrubbery or block walls.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
31. Wilbur Ave. to Winnetka Ave. TG 14 B5 to 12 F4	Trap. Sides C Bottom C, LF	N	10' paved	ROW Channel	Yes No	SF ②, MF, O ②	180-185
		S	10' paved	Channel ROW	No Yes		

Survey Notes

- ① Crossings:
Tampa Ave. (G): Moderately busy.
Corbin Ave. (G): Moderately busy.
Winnetka Ave. (G): Busy street.
- ② Other adjacent use is mobile home park
- ③ Single family homes in this reach are set approximately 10' above channel, usually separated by block walls and shrubs.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
32. Winnetka Ave. to Arroyo Calabasas TG 12 F4 to C4	Trap. ① Sides C Bottom C, LF ②	N	10' paved	ROW Channel	Yes No	SF ④, MF, C	186-198
		S	10' paved	Channel ROW	No Yes		

Survey Notes

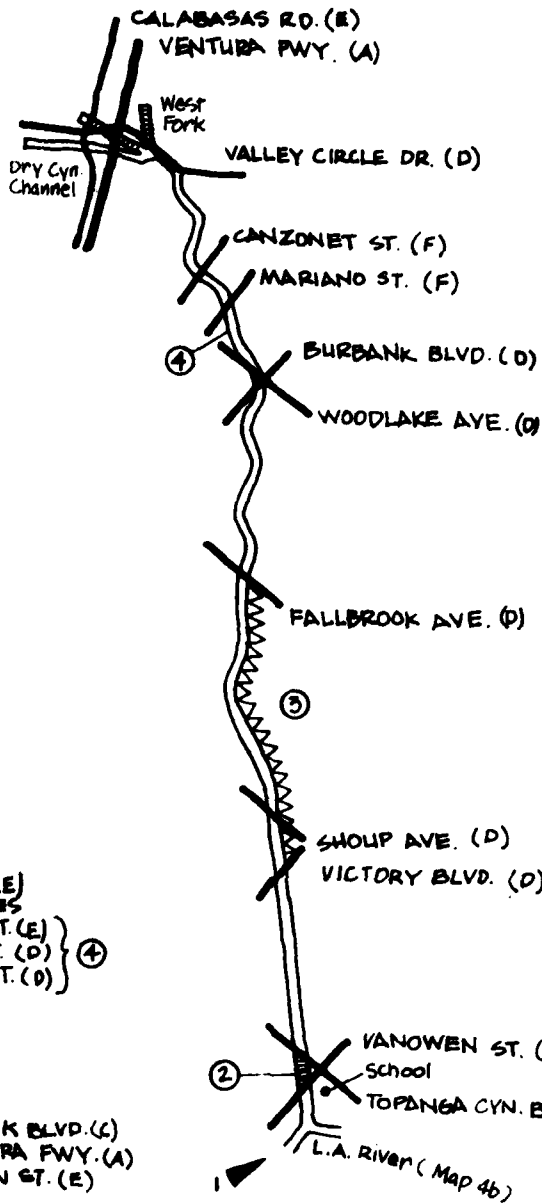
- ① Crossings & inlets:
Vanowen St. (G): Moderately busy traffic.
Mason St. (G): Moderately busy traffic.
Brown's Canyon Inlet obstructs N side.
De Soto Ave. (G): Busy street.
Canoga Ave. (G): Busy street. RR bridge crosses just E of Canoga.
Owensmouth Ave. (G): Light traffic.
Bell Creek/Arroyo Calabasas Inlets obstruct both sides.
- ② Low flow only as far as Brown Creek.
- ③ Channel becomes vertical at Owensmouth.
- ④ SF homes between Winnetka Ave. and De Soto Ave. are at same level as access road, usually set back from channel and screened by walls or shrubbery.
- ⑤ SF homes between Winnetka Ave. and Vanowen St. are at same level as access road, separated by chain link fences and scattered shrubbery.

BELL CREEK SOUTH FORK MAP 4b

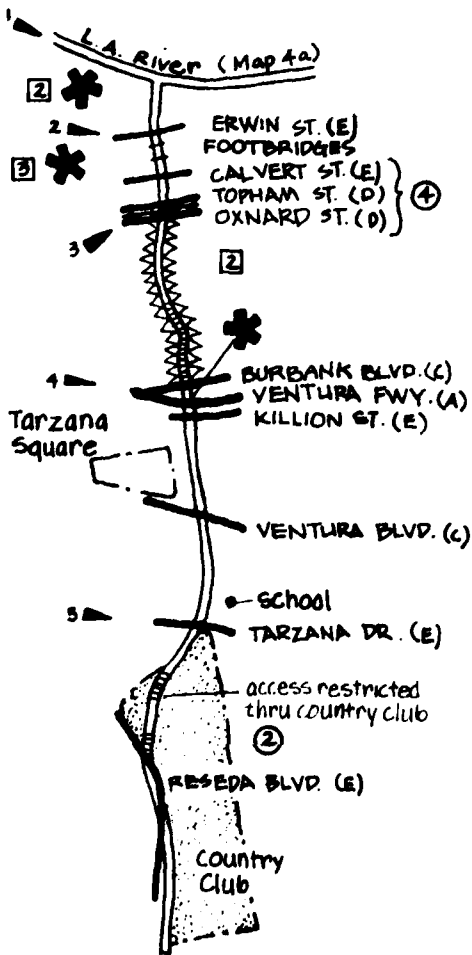
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Valley Circle Blvd TG 12 B4	Trap. Sides C Bottom C	N	15' paved	ROW Channel	Yes No	OS	198-200
		S	15' paved	Channel ROW	No Yes		

Survey Notes

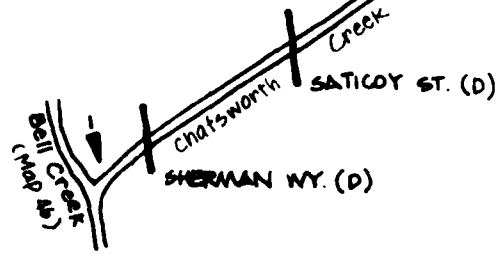
- ① Crossings and inlets:
Canoga Lyn Blvd. (G): Very busy.
Knob Ave. (G): Very busy.
Whitworth Creek Inlet obstructs N side.
Fallbrook Ave. (G): Very busy.
Flatt Ave. (G): Very busy.
Valley Circle Blvd. (G): Moderately busy.
- ② The South Fork of Bell Creek was not surveyed. There is no access in both sides of the channel with Bell Creek.



MAP 5a
CABALLERO CREEK



MAP 5b
ARROYO CALABASAS
ARROYO CALABASAS WEST FORK



MAP 5c
CHATSWORTH CREEK
DAYTON CREEK

CABALLERO CREEK MAP 5a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Erwin St. TG 14 C5	Vert. Sides C Bottom C	E	10' paved	ROW Channel	Yes Yes	SF C	201-202
		W	10' paved	Channel ROW	Yes Yes	SF 2	

Survey Notes

- ① Crossings:
Erwin St. (G): Light traffic.
- ② SF homes adjacent to channel, separated by 6' concrete block wall and narrow yards. Interiors of houses and yards are visible from access road.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Erwin St. to Linard St. TG 14 C5	Vert. Sides C Bottom C	E	15' dirt ②	ROW Channel	Yes Yes	SF ③	203-208
		W	15' dirt ②	Channel ROW	Yes Yes	SF ③	

Survey Notes

- ① Crossings:
Calvert St. (G): Light traffic.
Topham St. (G): Light traffic.
RR Tracks (G)
Oxnard St. (G): Light traffic.
- ② N of Topham St. the access road on the E side of channel is obstructed by cars parked on a paved area.
- ③ SF housing adjacent to channel, separated by 6' concrete block walls or chain link fences and narrow yards. Interiors of houses and yards are visible from access road.
- ④ The three streets and one set of railroad tracks, together with the interrupted access on the E side between Calvert and Topham, constitute a major obstruction.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Oxnard St. to Ventura Fwy. TG 14 L6	Vert. Sides C Bottom C	E	None ②	ROW Channel	No Yes	SF ③	208-209
		W	None ②	Channel ROW	No Yes	SF ③, MF	

Survey Notes

- ① Crossings:
Burbank Blvd. (G): Busy traffic.
Ventura Fwy. (G)
- ② Channel partially covered between Oxnard St. and Burbank Blvd. Access otherwise obstructed by residences.
- ③ SF homes adjacent to channel at same level, partially screened by vegetation. No privacy problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Ventura Fwy. to Tarzana Dr. TG 14 C6 to 21 C2	Vert. Sides C Bottom C	E	15' dirt Poor condition	ROW Channel	Yes Yes	SF ②, MF, C	210-211
		W	15' dirt Poor condition	Channel ROW	Yes Yes	SF ②, MF, C	

Survey Notes

- ① Crossings:
Killion St. (G): Light traffic
Ventura Blvd. (G): Heavy traffic
Tarzana Dr. (G): Light traffic.
- ② SF homes are adjacent to channel at the same level, usually screened by vegetation and block walls. No privacy problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Tarzana Dr. to Avenida Oriente TG 21 4B to 2C	Vert. Sides C Bottom C	E	②	ROW Channel	No Yes	4, 4	5
		W	③	Channel ROW	Yes No	05	

Survey Notes

- ① Crossings:
Reseda Blvd. (G): Crosses channel twice. Light traffic.
- ② E access is restricted by El Caballero Country Club, but there are no physical obstructions.
- ③ W access partially obstructed by Reseda Blvd.
- ④ Channel becomes a natural stream S of Avenida Oriente.

ARROYO CALABASAS MAP 5b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Ventura Fwy TG 12 C4	Vert. Sides C Bottom C	NW	③	ROW Channel	Yes Yes	SF ⑤	212, 213
		SE	15' paved ④	Channel ROW	Yes Yes	MF ⑤	

Survey Notes

- ① Crossings and Inlets:
Vanowen St. (G): Very busy
Topanga Cyn. Blvd. (G): very busy
Victory Blvd. (G): very busy
Shoup Ave. (G): very busy
Fallbrook Ave. (G): very busy
Woodlake Ave. (G): very busy
Burbank Blvd. (G): very busy
Mariano St. (G): light traffic
Cannon St. (G): Light traffic
Valley Circle Dr. (G): Very busy
Ventura Fwy. (G): Major obstruction
- ② Channel is covered by a shopping center parking lot between Vanowen and Topanga Canyon Blvd.
- ③ No access: 15' paved for most of reach. 4' dirt from Victory to Fallbrook.
- ④ SE side is narrow but passable from Woodlake to Mariano. SF house is adjacent, back yard comes close to channel. No fencing between yard and channel. Owner keeps horses in yard.
- ⑤ Housing adjacent, both sides, for most of reach. Improved separation needed in some places.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Bell Creek to Roscoe Blvd. TG 12 B3	Vert Sides C Bottom C	NE	15' dirt	ROW Channel	Yes Yes	SF, OS	3
		SW	15' dirt	Channel ROW	Yes Yes	SF	

Survey Notes

- ① Crossings and inlets:
 Sherman Way (G): Very busy.
 Saticoy St. (G): Very busy.
 Dayton Creek inlet obstructs west side.
 Roscoe Blvd. (G): Very busy.

CHATSWORTH CREEK MAP 5c

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Chatsworth Creek to Orcutt Ranch Park To 12 A2 to 5 E1	Trap Sides C Bottom C ② ③	N	15' dirt	ROW Channel	Yes ④	SF	3 214
		S	15' dirt	Channel ROW	Yes ④	SF, St	

Survey Notes

- ① Crossings and inlets:
 Woodlake Ave. (G): Very busy.
 Valley Circle Blvd. (G): Very busy.
 ② Channel ROW is covered for 100' a short distance E of the park by 3 houses.
 ③ Natural stream through park. Channelized from park to Valley Circle.
 ④ Channel fenced or walled W of Woodlake. ROW fenced or walled except S side W of Woodlake.
 ⑤ Justice St. adjacent-possible alternate route for trails.
 ⑥ Not surveyed W of park.

BROWNS CREEK MAP 6

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Parthenia St. TG 12 E4	Vert Sides C Bottom C LF	W	15' dirt	ROW Channel	Yes Yes	SF	3
		E	15' dirt	Channel ROW	Yes Yes	SF	

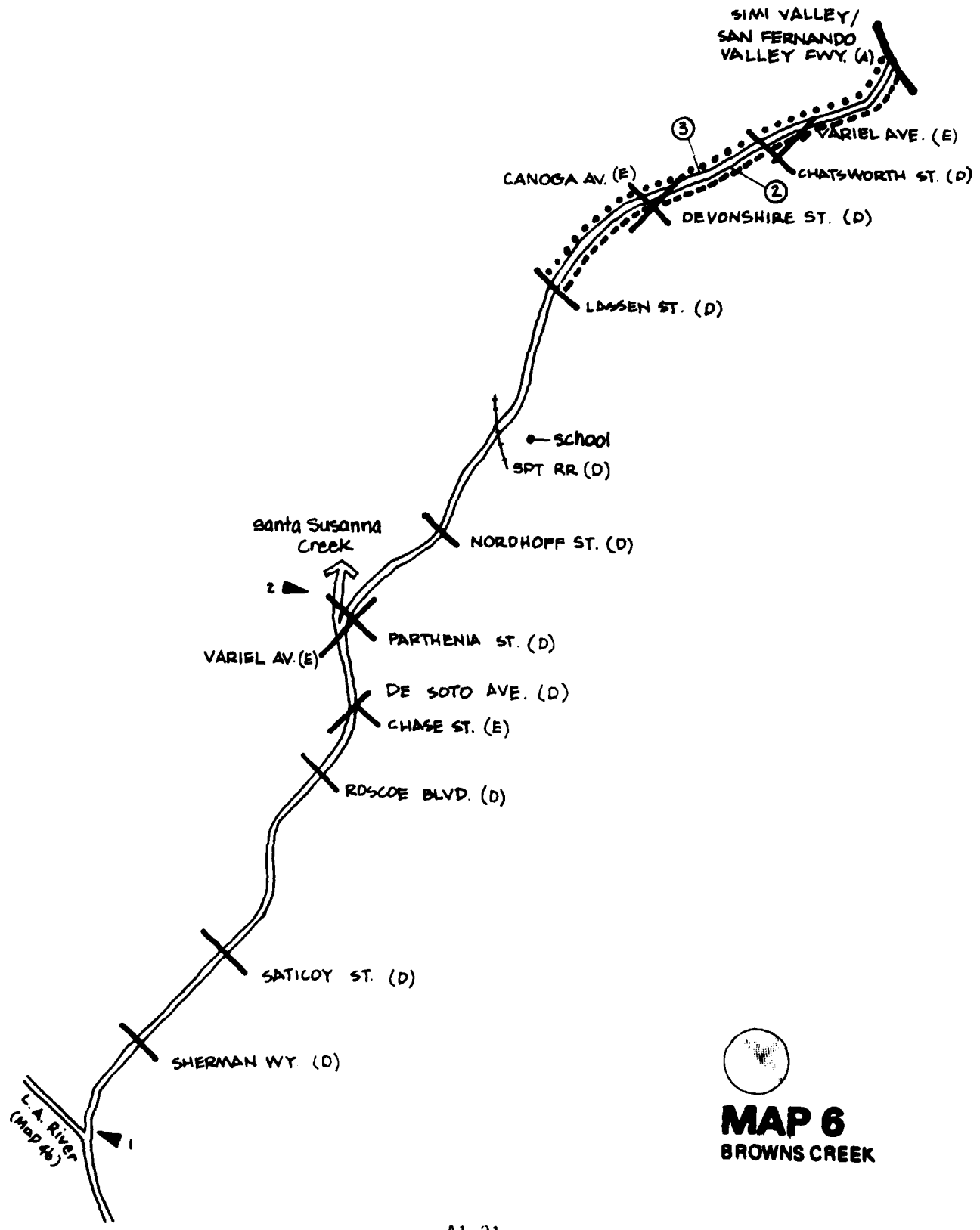
Survey Notes

- ① Crossings and inlets:
 Sherman Way (G): Very busy.
 Saticoy St. (G): Very busy.
 Roscoe Blvd. (G): Very busy.
 DeSoto Ave. (G): Very busy.
 Varrel Ave. (G): Moderately busy.
 Santa Susana Creek inlet obstructs W side.
 Parthenia St. (G): Very busy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2 Parthenia St. to Similian Fernando Valley Fw. TG 6 D6 to D1	Vert Sides C Bottom C, LF	W	15' dirt	ROW Channel	Yes Yes	1, SF	4 215, 216
		E	15' dirt	Channel ROW	Yes Yes	1, OS, SF	

Survey Notes

- ① Crossings and inlets:
 Nordhoff St. (G): Very busy.
 SPT P.R. (G)
 Lassen St. (G): Very busy.
 Canoga Ave. (G): Moderately busy.
 Devonshire St. (G): Very busy.
 Chatsworth St. (G): Very busy.
 Varrel Ave. (G): Moderately busy.
 Similian Fernando Valley Fw. (G): Very busy. Major obstruction.
 ② Existing Browns Creek Bike Trail.
 ③ Existing Browns Creek Equestrian Trail.



MAP 6
BROWNS CREEK

ALISO CREEK MAP 7

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Wilbur Ave. Debris Basin IG 14 B4	Vert Sides C Bottom C	W	20' dirt ②	ROW Channel Yes Yes	OS, SF, OS, I	3	217-221
		E	20' dirt ②	Channel ROW Yes Yes			

Survey Notes

- ① Crossings and Inlets:
 Vanowen St. (G): Very busy.
 Sherman Way (G): Very busy.
 Salicoy St. (G): Very busy.
 Strathern St. (G): Very busy.
 Wilbur Ave. (G): Very busy.
 Roscoe Blvd. (G): Very busy.
 Parthenia St. (G): Very busy.
 Eddy St. RR (G): Very busy.
 Debris Basin
- ② No access road on west side between Strathern and Wilbur Ave.
- ③ Existing linear park in powerline easement.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Wilbur Ave. Debris Basin to Aliso Debris Basin IG 7 B5	Vert Sides C Bottom C	W	15' dirt	ROW Channel Yes Yes	SF, OS	4	222-228
		E	15' dirt	Channel ROW Yes Yes			

Survey Notes

- ① Crossings and Inlets:
 Nordhoff St. (G): Very busy.
 Plummer St. (G): Very busy.
 Wilbur Ave. (G): Very busy.
 Wilbur Crk. inlet enters from NW. Crossed by existing footbridge.
 Lassen St. (G): Very busy.
 Reseda Blvd. (G): Very busy.
 Devonshire St. (G): Very busy.
 Chatsworth St. (G): Very busy.
 San Fernando Mission Blvd. (G): Very busy.
- ② Existing undeveloped park site at confluence of Aliso Wash and Limekiln Cyn. Wash, opportunity for recreation area.
- ③ Existing linear park in powerline easement.
- ④ Opportunity for recreational use in existing debris basin.

LIMEKILN CREEK MAP 7

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Wilbur Ave. Debris Basin to Limekiln Debris Basin IG 7 B6	Vert Sides C Bottom C	W	15' dirt	ROW Channel Yes Yes	I, OS, SF, OS	2	229-233
		E	15' dirt	Channel ROW Yes Yes			

Survey Notes

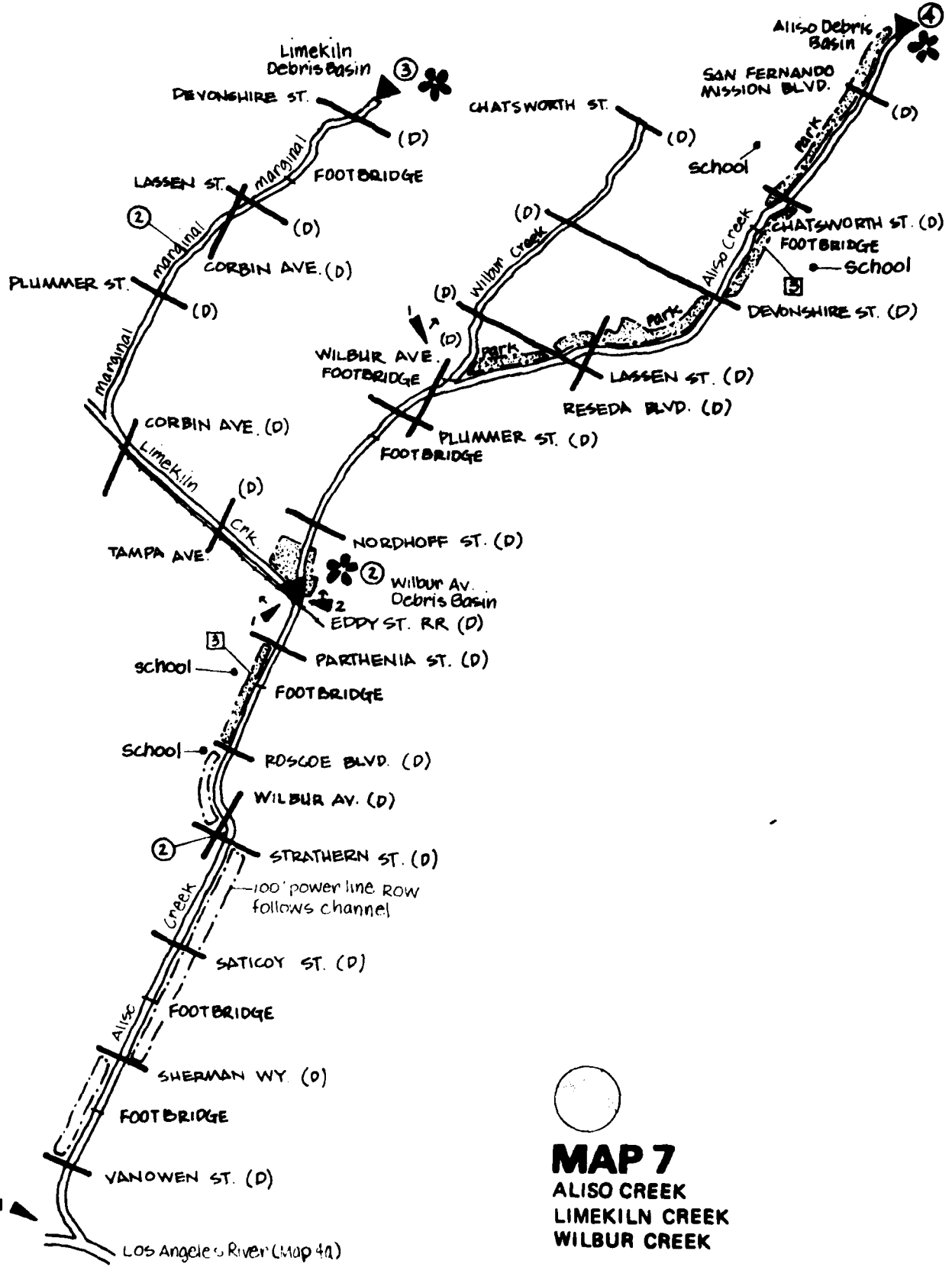
- ① Crossings and Inlets:
 Tampa Ave. (G): Very busy.
 Corbin Ave. (G): Very busy.
 Plummer St. (G): Very busy.
 Corbin Ave. (G): Very busy.
 Lassen St. (G): Very busy.
 Devonshire St. (G): Very busy.
- ② Easement is 10' wide and steeply sloped on west side of channel.
- ③ Opportunity for recreational uses in existing debris basin.


WILBUR CREEK MAP 7

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Aliso Wash to Chatsworth St. IG 7 B4	Vert Sides C Bottom C	W	15' dirt ③	ROW Channel Yes Yes	SF	3	234, 235
		E	15' dirt ③	Channel ROW Yes Yes			

Survey Notes

- ① Crossings and Inlets:
 Lassen St. (G): Very busy.
 Devonshire St. (G): Very busy.
 Chatsworth St. (G): Very busy.
- ② Channel is covered beyond Chatsworth St., but easement continues between single family residences for an undetermined distance.
- ③ Easement is 30' wide on each side. Outside 15' slopes up from flat area.




MAP 7
 ALISO CREEK
 LIMEKILN CREEK
 WILBUR CREEK

BULL CREEK MAP 8a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Los Angeles River to Saticoy Street TR 14 F5	Trap ② Sides C ③ Bottom C ③	W	20' Dirt	ROW Yes Channel No	OS, SF	3	236-238
		E	20' Dirt	Channel No ROW Yes	OS, SF		

Survey Notes

① Crossings:

- SPT R.R. (G):
- Victory Blvd. (G): Busy street.
- Vanowen St. (G): Busy street.
- Sherman Way (G): Busy street.
- Saticoy St. (G): Busy street.

- ② Channel is vertical under Victory, partially vertical under Vanowen, Sherman and Saticoy.
- ③ Channel is rip-rap with dirt bottom between Los Angeles River and Victory Blvd.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2 Saticoy St. to Plummer St. TG 14 F2	2 Sides C Bottom C	W	15' Dirt	ROW Yes Channel No	SF, 1, SF	2	239, 240
		E	15' Dirt	Channel 3 ROW Yes	C, 1, SF		

Survey Notes

1 Crossings:

- Stagg St. (G): Moderately busy.
- Roscoe St. (G): Moderately busy.
- SPT R.R. (G)
- Parthenia St. (G): Busy street.
- Nordhoff St (G): Busy street.
- Plummer St./Hayvenhurst Ave. Intersection (G): Busy intersection.

- 2 Channel is trapezoidal on W side but vertical on E side between Stagg and Plummer; becomes partially vertical on W side under Stagg and Roscoe.
- 3 Fenced N of Stagg.

BULL CREEK MAP 8b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3 Plummer St. to San Fernando Mission Blvd. TG B A4	Trap Sides C Bottom C	W	None	ROW Yes Channel No	SF	3	241-245
		E	15' dirt	Channel No ROW Yes	SF		

Survey Notes

1 Crossings and inlets:

- Granada Channel inlet obstructs access on W side.
- Luxton St. (G): Busy street.
- Devonshire St. (G) Busy street.
- Chatworth St. (G) Busy street.
- Celtic St. (G): Light traffic.
- San Fernando Mission Blvd. (G) Busy street.

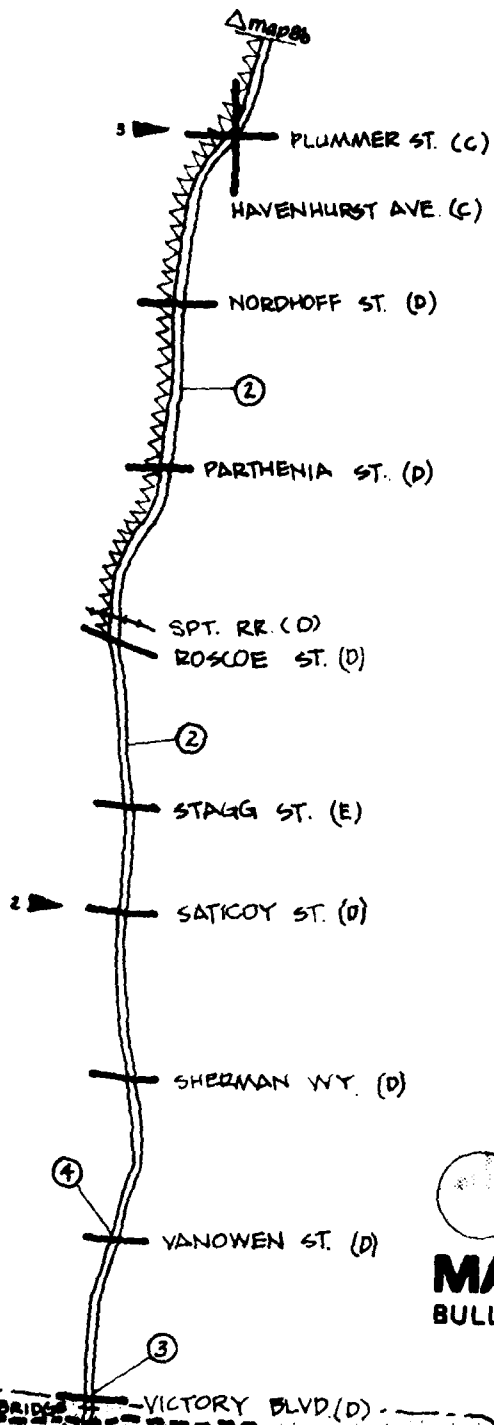
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
San Fernando Mission Blvd. to Rinalda St TG B A1	Vert Sides C Bottom C	W	15' Paved	ROW Yes Channel No	N, SF	3	246, 247
		E	None	Channel No ROW Yes	S, SF		

Survey Notes

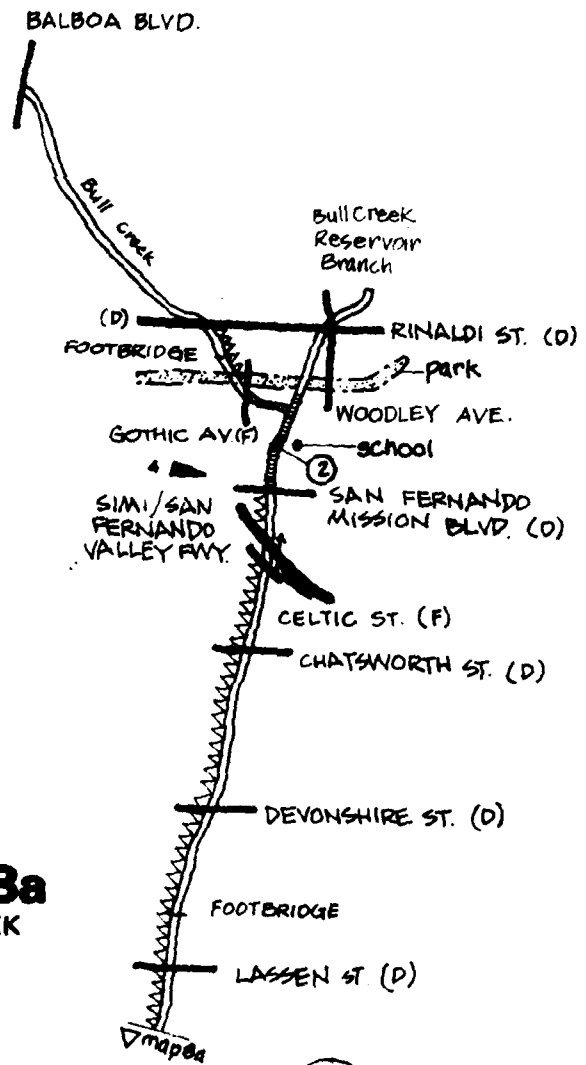
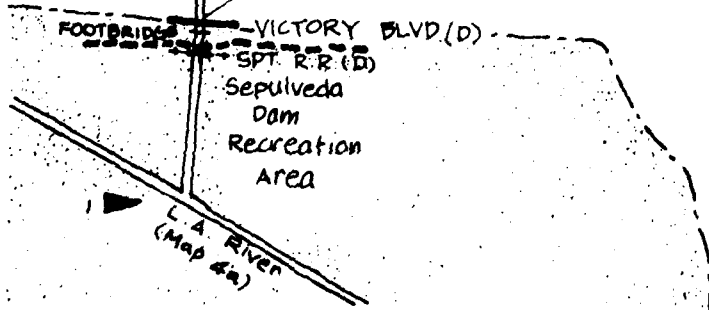
1 Crossings:

- Luthic Ave (G): Light traffic.
- Rinalda St (G) Busy street.

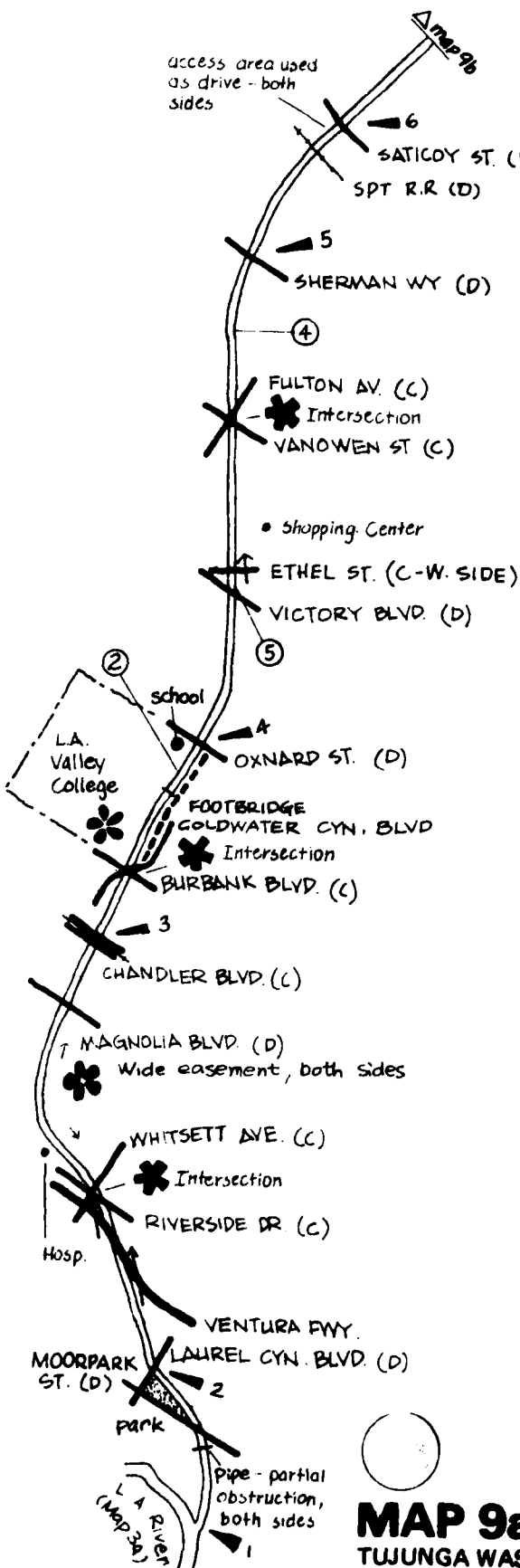
- 2 Channel is covered beyond San Fernando Mission Blvd. by school grounds and parking lot, resurfaces at Luthic Ave.
- 3 Channel was not surveyed beyond Rinalda St.



MAP 8a
BULL CREEK

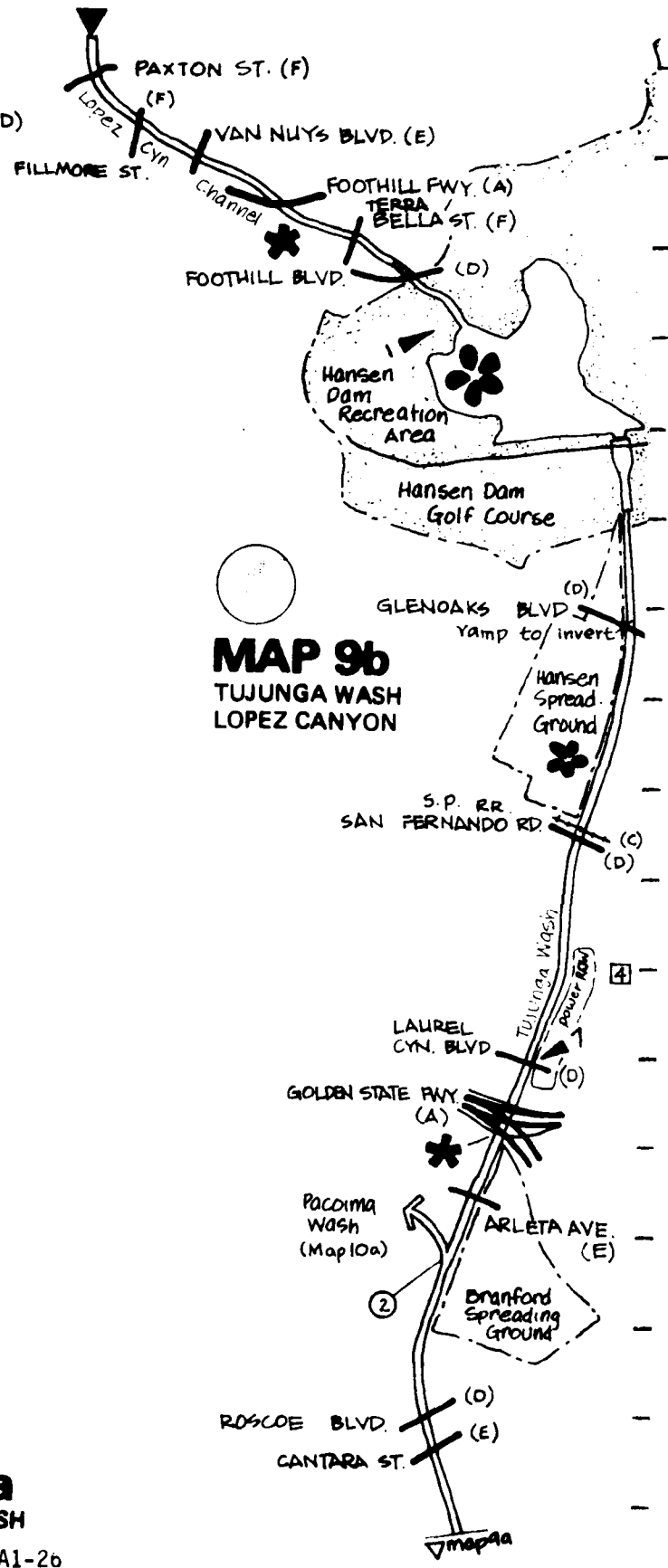


MAP 8b
BULL CREEK



MAP 9a
TUJUNGA WASH

A1-26



MAP 9b
TUJUNGA WASH
LOPEZ CANYON

TUJUNGA WASH MAP 9a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Laurel Canyon Blvd. TG 23 C4	Vert. Sides Bottom C	W	20'-25' ②	ROW Channel No Yes	V, ST, Church, MF, OS	3	248-253
		E	15'-25' Dirt	Channel ROW Yes Yes	MF, SF ③		

Survey Notes

- ① Crossings:
Pipeline crossing partially obstructs both sides 200' S of Moorpark.
Moorpark St. (G): Busy street.
Laurel Canyon Blvd. (G): Busy street.
- ② Paved from confluence to Moorpark.
- ③ SF housing E side, Moorpark to Laurel Canyon. Yards 10' higher than access road. Separated by chain link, vegetation.

NOTE: Single-family housing is adjacent to Tujunga Wash for much of its length. Potential privacy conflicts are not indicated on the map because of the frequency with which they occur.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Laurel Cyn. Blvd. to Chandler Blvd. TG 23 B2	Vert. Sides C Bottom C	W	40'-60' Dirt ②	ROW Channel Yes Yes	SF ④ Hospital, MF	3	254-257
		E	50'-60' Dirt ③	Channel ROW Yes Yes	ME, S, OS, C, SF, SF ⑤		

Survey Notes

- ① Crossings:
Ventura Fwy. (AG): Does not obstruct either side.
Riverside Dr./Whittsett Ave. Intersection (G): Busy intersection. Major obstruction. Tunnel under intersection would be 250'+.
Magnolia Blvd. (G): Busy street.
Chandler Blvd. (G): Divided St. with RR in middle. S auto bridge and RR in middle. S auto bridge and RR bridge are free-standing over ROW; no tunnel required. N auto lanes are supported within ROW; tunnel would be required to cross under.
- ② W side access area: 12' wide first 500' N of Riverside.
- ③ E side access area: 12' wide from Ventura Fwy. to Riverside, 30' wide first 100' N of Riverside.
- ④ SF housing, W side.
Laurel Canyon-Riverside: Yards level with access area, separated by chain link, vegetation, wood slat fences. Potential problems.
Riverside to Magnolia: Yards level, separated by concrete block, chain link, wood slats, vegetation. Potential problems.
- ⑤ SF housing, E side.
Riverside to Magnolia: Yards level with access area, separated by chain link, vegetation. Potential problem.
Magnolia to Chandler: Yards level, separated by concrete block.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Chandler Blvd. to Oxnard St. TG 16 A6	Vert. Sides C Bottom C	W	②	ROW Channel No Yes	ST, S	4	258-260
		E	②	Channel ROW Yes No	SF ④, ST		

Survey Notes

- ① Crossings:
Burbank Blvd./Coldwater Cyn. Blvd. Intersection (G): Busy intersection. Major obstruction. Tunnel under intersection would be about 180' long.
Oxnard St. (G): Busy street.
- ② A greenbelt development occupies the W access area from Chandler to Oxnard, and the E access area from Burbank to Oxnard. The W side contains a dirt hiking path, and the E side a paved bicycle path and a rest area for bicyclist. A wooden bridge connects the two sides of the channel E of L.A. Valley College. E access area is 50' dirt from Chandler to Burbank.
- ③ SF housing, E side, Chandler to Burbank. Yards level with access area, separated by concrete block.
- ④ There is a large mural on the W side of the channel adjacent to Valley College.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Oxnard St. to Sherman Way TG 16 A5	Vert. Sides C Bottom C	W	50'-60' Dirt ②	ROW Channel Yes Yes	MF, SF ④	3	261-264
		E	③	Channel ROW Yes Yes	ST, MF, Shopping Ctr., SF ④		

Survey Notes

- ① Crossings:
Victory Blvd. (G): Busy street.
Ethel St. (G): Moderately busy street (entrance to shopping center). Tunnel (7' wide, 8' high) under E side.
Vanowen St./Fulton Ave. Intersection (G): Busy intersection. Major obstruction. Tunnel under intersection would be 200'+.
Sherman Way (G): Busy street.
- ② W side access area: 75' dirt from Victory to Ethel.
- ③ E side access area: 60' dirt, no paving for short distance N of Oxnard, between Ethel and Vanowen, and part way to Sherman. 12' paved, no dirt for 100' S of Sherman. 10' paved + 40'-50' otherwise.
- ④ SF housing along most of W side, along E side N of shopping center at Ethel. Yards mostly level with access areas, separated by concrete block, chain link, vegetation, wood slats. Potential problems in several places.
- ⑤ Possible rest area S of Ethel adjacent to shopping center.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Sherman Way to Saticoy St. TG 16 A3	Vert. Sides C Bottom C	W	②	ROW Channel No Yes	U, I	3	
		E	③	Channel ROW Yes No	C, SF ④, R		

Survey Notes

- ① Crossings:
Saticoy RR (G)
Saticoy St. (G): Busy street.
- ② W side access area: 10' dirt to 150' N of Sherman, 30' dirt to RR, 20' paved from RR to Saticoy. Used as drive by adjacent industry from RR to Saticoy.
- ③ E side access area: 10' paved + 8' dirt for 200', 10' paved + 50' dirt remainder of distance to RR, 12' paved from RR to Saticoy. Used as drive by adjacent office from RR to Saticoy.
- ④ SF housing, E side, Sherman to RR. Yard 8' higher than access area, separated by chain link, wood slats, vegetation.

TUJUNGA WASH MAP 9b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Saticoy St. to Laurel Cyn. Blvd. TG 15 F2	Vert. Sides C Bottom C	W	②	ROW Channel Yes	SF ④, ST	3	265-267
		E	③	Channel ROW Yes	SF ④, Church, ST, OS		

Survey Notes

- ① Crossings and inlets:
 Cantara St. (G): Moderately busy.
 Roscoe Blvd. (G): Busy street.
 Pacoima Wash inlet obstructs access on W side.
 Arleta Ave. (G): Moderately busy.
 Golden State Fwy. Main bridge (AG) does not obstruct either side. Exit ramp to S (G) obstructs both sides.
 Laurel Cyn. Blvd. (G): Busy street.
- ② W side access area: 50'-60' dirt except in the following places: 10' paved + 40' dirt last 300' S of Cantara; 10' paved, Roscoe to Canterbury (Canterbury does not cross channel); 10' paved + 25' dirt N of Canterbury; 50'-60' dirt from S of Arleta to Laurel Cyn.
- ③ E side access area: 60' dirt N of Saticoy; 10' paved + 40' dirt last 300' S of Cantara; 8' paved + 5' dirt, Cantara to Roscoe; 10' paved + 40'-50' dirt, remainder of distance.
- ④ SF housing: Both sides, Saticoy to Cantara; W side, Cantara to Roscoe; W side, Arleta to Laurel Cyn. Yards level with access area. Potential problems in a number of places.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Laurel Cyn. Blvd. to Hansen Dam TG 9 C4	Vert. Sides C Bottom C	W	②	ROW Channel No	V, OS	2	268-272
		E	③	Channel ROW Yes No	Power ROW, I, OS		

Survey Notes

- ① Crossings:
 San Fernando Rd. and SP RR: San Fernando bridge obstructs W side only. RR obstructs both sides. Tracks are 10' above ROW level on embankment, easy to tunnel under. Busy street.
 Glenoaks Blvd. (G): Busy street.
 Hansen Dam: End of channel.
- ② W side access area: 60' dirt, Laurel Cyn. to San Fernando; 20'-50' dirt, San Fernando to Glenoaks; 12' dirt N of Glenoaks.
- ③ E side access area: 60' dirt, Laurel Cyn. to San Fernando; 10' paved + 20'-50' dirt, San Fernando to Hansen Dam Golf Course.

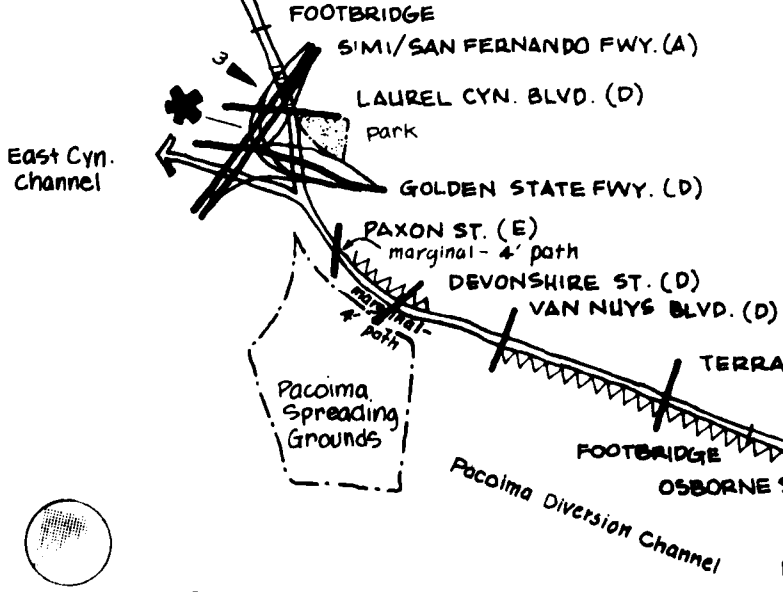
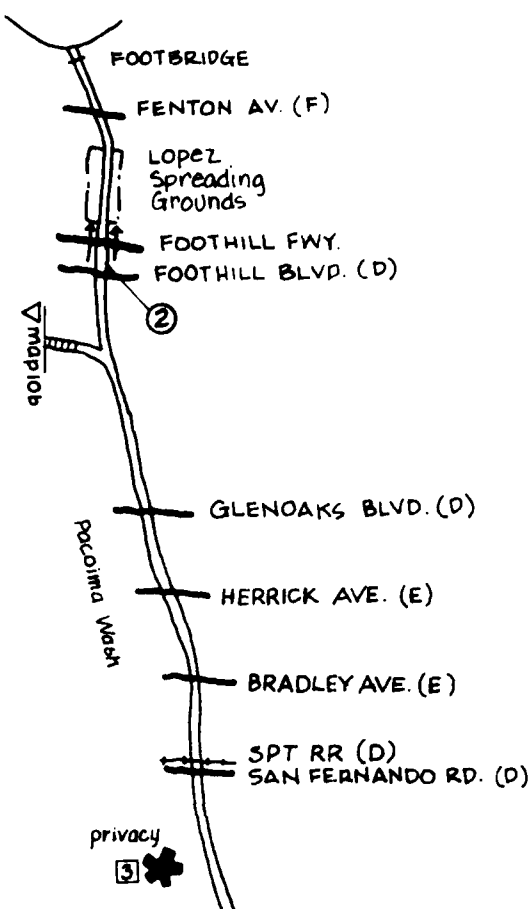
LOPEZ CANYON CHANNEL MAP 9b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Hansen Dam to Debris Basin TG 9 C2	Vert. Sides C Bottom C	SW	15' Dirt	ROW Channel Yes	SF, OS	3	273 etc
		NE	15' Paved	Channel ROW Yes	OS		

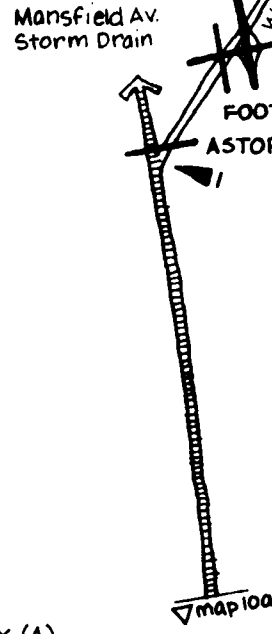
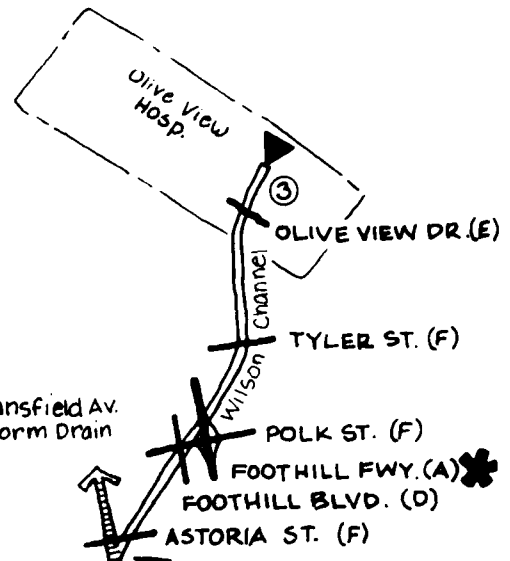
Survey Notes

- ① Crossings:
 Foothill Blvd. (G): Busy street.
 Terra Bella St. (G): Light traffic.
 Foothill Fwy. (G): (Under construction)
 Van Nuys Blvd. (G): Light traffic.
 Fillmore St. (G): Light traffic.
 Paxton St. (G): Moderately busy.
- ② Channel is covered for 300' N of Foothill.

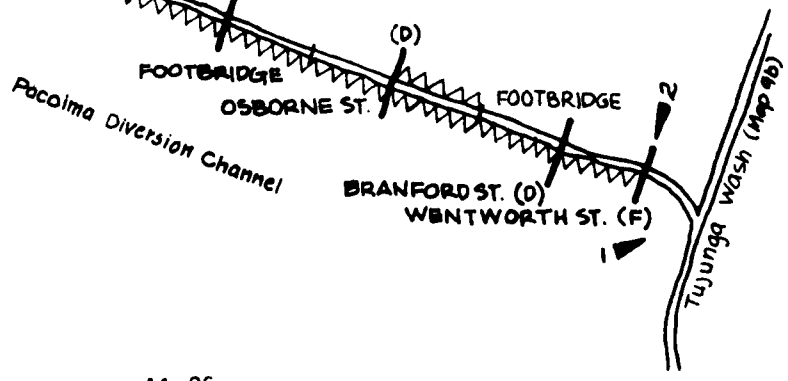
Lopez Flood Control Basin



MAP 10a
PACOIMA WASH



MAP 10b
WILSON CHANNEL



PACOIMA WASH MAP 10a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Tujunga Wash to Wentworth St. TG 9 A6	Vert. Sides C Bottom C	SM	15' Dirt	ROW Channel	Yes Yes	SF ②	3 279, 280
		NE	15' Dirt	ROW	Yes Yes		

Survey Notes

- ① Crossings:
Wentworth St. (G): Light traffic.
- ② SF housing, 4' higher than ROW on E side, separated by chain link, 2' lower than ROW on W side, separated by 5' concrete block wall. Potential problems, W side.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2 Wentworth St. to Simi-San Fernando Fwy. TG 9 A6 to B E2	Trap. Sides C Bottom C	SM	None ②	ROW Channel	Yes -	SF 4, Church, V, OS	3 281-291
		NE	10' Paved. Bad Condition ③	Channel ROW	No Yes		

Survey Notes

- ① Crossings:
Branford St. (G): Moderately busy.
Osborne St. (G): Busy street.
Terra Bella St. (G): Moderately busy.
Van Nuys Blvd. (G): Busy street.
Devonshire St. (G): Busy street.
Paxton St. (G): Moderately busy.
East Cyn. Channel inlet obstructs W side.
Golden State Fwy./Laurel Cyn./Simi-San Fernando Fwy. Large complex of Simi/S.F. Fwy. is a major obstruction. Golden state does not obstruct.
- ② Access area, SM side: 3'-4' dirt from 300' S of Devonshire to Paxton.
- ③ Access area, NE side: No access from Montague St. footbridge to Osborne, from 300' S of Devonshire to N of Devonshire, and N of Paxton. 4' dirt path S of Paxton.
- ④ SF housing is adjacent to the channel on both sides for most of this reach. Yards level with ROW, generally separated by chain link and heavy vegetation. Problems possible in some places.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3 Simi-San Fernando Fwy. to Lopez Flood Cont. Basin TG B11 to 384	Trap Sides C Bottom C	W	10'-35' Dirt and Gravel 2	ROW Channel	Yes	V. I. MF, OS	3 293-297
		E	10'-25' Dirt and Gravel	Channel ROW	Yes		

Survey Notes

- ① Crossings and inlets:
San Fernando Rd.: Busy Street. W side of bridge is free-standing over ROW. E side has abutment within ROW.
SPT RR. W side of bridge is free-standing over ROW. E side has abutment within ROW.
Bradley Ave. (G): Moderately busy.
Herrick Ave. (G): Moderately busy.
Glenns Blvd. (G): Busy street.
Mansfield Ave.: Storm drain inlet obstructs W side.
Foothill Blvd. (G): Busy street.
Foothill Fwy. (AG): Does not obstruct either side.
Linton Ave (G): Light traffic.
Lopez Dam
- ② A few pieces of industrial equipment are stored in the E access area between Foothill Blvd. and Foothill Fwy., obstructing access.
- ③ SF housing, E side, between Fwy. and San Fernando. Yards 3' lower than access road, separated by chain link fence. Potential problem.
SF housing N of Bradley, E side, 8' higher than access road.
- ④ Channel in this reach is narrow (7') and has sloping floors which are not suitable for trail use.

WILSON CHANNEL MAP 10b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Astoria St. ② to Olive View Dr. ③ TG 2 E1	Vert. Sides C Bottom C	W	20' Dirt	ROW Channel	Yes Yes	3	303
		E	20' Dirt	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
Foothill Blvd. (G): Busy street.
Park St. (G): Light traffic.
Cresthill Fwy. (G): Major obstruction
Linton St. (G): Light traffic.
Olive View Dr. (G): Moderately busy.
- ② Channel is underground S of Astoria.
- ③ Not surveyed N of Olive View.

BURBANK WESTERN SYSTEM MAP 11a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Riverside Dr. TG 24 E2	Vert. Sides C Bottom C	E	②	ROW Channel No Yes	OS, SF [3]	2	305-307
		W	③	Channel ROW Yes	Stables [4]		

Survey Notes

- Crossings and inlets:
L.A. River confluence: An equestrian bridge crosses the Burbank channel about 400' N of the confluence. Small channel inlet obstructs W side 700' from confluence. Riverside Dr. (G): Moderately busy.
- E side access: 15' equestrian trail from confluence to equestrian bridge. Open field comes to edge of channel between bridge and SF houses (700' N of confluence). No access from this point to 110' S of Riverside (yards and sheds extend to edge of channel). 9' dirt access last 110'.
- Open field comes to edge of channel from confluence to stables. No access from stables to Riverside.
- Numerous equestrian facilities W of channel along L.A. River. Numerous equestrian trails in vicinity.
- SF housing. E side, from 700' N of confluence to Riverside. Yards are level with ROW, separated by wooden fences.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Riverside Dr. to Victory Blvd. TG 24 E2	Vert. Sides C Bottom C	E	②	ROW Channel No Yes	SF [4]	3	308-310
		W	③	Channel ROW Yes No	MF, SF [4], C		

Survey Notes

- Crossings:
Victory Blvd. (G): Moderately busy.
- E access space is obstructed for first fourth of distance by trees and large shrubs planted for screening of the adjacent yards. A shed obstructs this segment in one place. The middle half of the distance is paved, and is part of a parking lot. The remaining distance is dirt, and slopes very steeply.
- W access space is obstructed for first third of distance by trees, large shrubs, and a shed. Remainder of distance is 15' wide, dirt, and slopes steeply to the side; not usable without retaining wall.
- SF housing, both sides, first third of distance. Houses level with ROW, separated by vegetation, chain link fences. Several of the lots have horses in the yards.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Victory Blvd. to Olive St. TG 24 E2	Vert. Sides C Bottom C	E	15' dirt ②	ROW Channel ④ Yes	I, SF [3], MF, I, ST	2	311-324
		W	③	Channel ROW ④ Yes	C, SF [3], MF, I		

Survey Notes

- Crossings and inlets:
Alameda Ave. (G): Moderately busy.
Footbridge (5' AG): Obstructs both sides at Elwood.
Pipe crossing obstruct: both sides near Cedar (2-1/2' high).
Providencia Ave./Lake St. intersection (G): Moderately busy.
Verdugo Ave. (G): Light traffic.
RR Bridge at Olive St. (G): Tracks can be crossed on lightly travelled street adjacent to ROW.
Olive St. (G): Light traffic.
- E side access: Steep side slope for most of distance. 3'-7' retaining wall would be needed for trail use.
- W side access: No access from Victory to Elm. C and MF extend to channel edge. 15'-20' dirt from Elm to Alameda (2' retaining wall needed). No access Alameda to Valencia; SF and MF housing extend to edge of channel. 15' dirt (2'-5' retaining wall needed) N of Valencia. No access from RR bridge S of Olive to Olive St. (building extends to edge of channel).
- No ROW fencing along much of reach. C, I, and MF fenced, SF usually not.
- SF housing scattered, both sides, Victory to Alameda. Mostly SF from Alameda to Providencia, both sides. Yards 5'-6' higher than ROW. Some concrete block and wood slat, but often no separation except scattered vegetation. SF third of distance from Providencia to Verdugo, both sides, 4'-6' higher than ROW, heavily screened by shrubs (no fencing).
- Large walnut trees obstruct access last 150' S of Verdugo.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Olive St. to Golden State Fwy. TG 17 D6	Vert. Sides C Bottom C	E	20' dirt ②	ROW Channel Yes Yes	I, [3], RR [5]	2	325-330
		W	20' dirt ②	Channel ROW Yes Yes	I [3]		

Survey Notes

- Crossings and inlets:
Magnolia Blvd. (G): Light traffic.
2 RR bridges between Magnolia and Burbank (bottoms at grade, tracks 6' AG).
Vanowen St. channel inlet obstructs W side 500' S of Burbank (See ④).
Burbank Western channel is covered from Vanowen St. Inlet to 150' N. Several sets of RR tracks cross channel over covered section (See [5]).
Burbank Blvd. Elevated. Does not obstruct Vanowen St. channel ROW.
Golden State Fwy. Major obstruction of Burbank Western, both sides, from grade to 30' AG. Channel is covered by freeway for about 1/4 mile.
- Sides slope: 2'-6' retaining wall needed most of W side, all of E side.
- Adjacent industry both sides. Potential for commuter use. Lockheed Aircraft short distance to N.
- Vanowen St. channel continues past Burbank Blvd. for about 700' before going underground.
- Several sets of RR tracks parallel the fwy. from Providencia to the N. The tracks and the fwy together constitute a major barrier to connection of the channel S of the fwy. with that N of the fwy.

BURBANK WESTERN SYSTEM MAP 11b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Golden State Fwy. to San Fernando Blvd. TG 17 D5	Vert. Sides L Bottom C	NE	②	ROW Channel No Yes	St	3	331
		SW	2'-20' dirt not visible ③	Channel Yes ROW	F		

Survey Notes

- Crossings and inlets.
Channel is covered by fwy. for 1/4 mile. Surfaces near Broadway and Leland Way.
San Fernando Blvd. (G) Busy street.
- Adjacent street comes to edge of channel (Leland Way).
- Freeway entrance ramp is immediately adjacent to channel at SE end. Access widens to the NW, reaches 20' at San Fernando. Steep slope near San Fernando separated from freeway only by guard rail.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. San Fernando Blvd. to Cohasset St. TG 17 E3	Vert. Sides C Bottom C	NE	Bicycle Trail ②	ROW Channel No Yes	St, SF, B, C	3	332-333
		SW	15'-35' dirt ③	Channel Yes ROW No ④	F		

Survey Notes

- Crossings and inlets.
Channel is underground from SE of San Fernando to approximately Morgan and Jackson St. intersection.
Buena Vista St. (G) Busy street.
Golden State Fwy. access ramps from Buena Vista (G). Two roads with daylight between. Total obstructed distance of about 150'.
Cohasset St. (G) Light traffic.
- Bicycle trail begins near Morgan/Jackson intersection, leaves channel at Buena Vista, re-enters channel ROW at Naomi. From Buena Vista to fwy. access roads ROW is planted with ground cover. N of access roads there is a 12' dirt road to Tulare. Naomi St. is adjacent to the channel edge from Tulare to the N for 100'. Bicycle trail resumes at this point, continues to terminus at Cohasset.
- 35' dirt strip separates fwy. lanes and channel for most of the distance between San Fernando and Buena Vista. The SW half of this strip is planted with large shrubs. Close proximity to freeway traffic. Embankment rises between channel and freeway approaching Buena Vista, and continues N of Buena Vista, providing separation from fwy. traffic. There is a 15' dirt strip at the bottom of the embankment from Buena Vista to Cohasset (8' between Buena Vista and fwy. access roads).
- NE ROW fenced only from Naomi to Cohasset.
- SF (two houses) adjacent to NE side of NW of Frederick St. Yards 2' higher than ROW, no separation from ROW.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Cohasset St. to Hollywood Way TG 17 B2	Vert. Sides C Bottom C	NE	20' dirt	ROW Channel No Yes	St ③	3	334-335
		SW	12' dirt ②	Channel Yes ROW No	F		

Survey Notes

- Crossing.
Hollywood Way (G) Moderately busy
- SW access narrows and rises fairly steeply near Hollywood Way to meet the exit ramp descending from the freeway. Narrowest point 8' Bed for trail.
- Channel is paralleled for entire reach by Glenoaks Blvd., which has wide outside lanes and is a good street for bicycling.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
8. Hollywood Way to Glenoaks Blvd TS 17 A2	Vert. Sides C Bottom C	NE	12' dirt	ROW Channel No Yes	St	3	336
		SW	10' dirt ②	Channel Yes ROW No	F		

Survey Notes

- Crossings
Lanark St. (G) Light traffic.
Glenoaks Blvd. (G) Moderately busy. Street crosses diagonally. Long tunnels would be required for undercrossing (150').
- 30' dirt strip separates fwy. lanes and channel for most of the distance between Hollywood Way and Glenoaks. The SW half of this strip is planted with shrubs. Close proximity to freeway traffic for much of the reach on this half. Embankment rises approaching Lanark and continues past Lanark, providing separation from fwy. traffic for about half the distance of the reach.

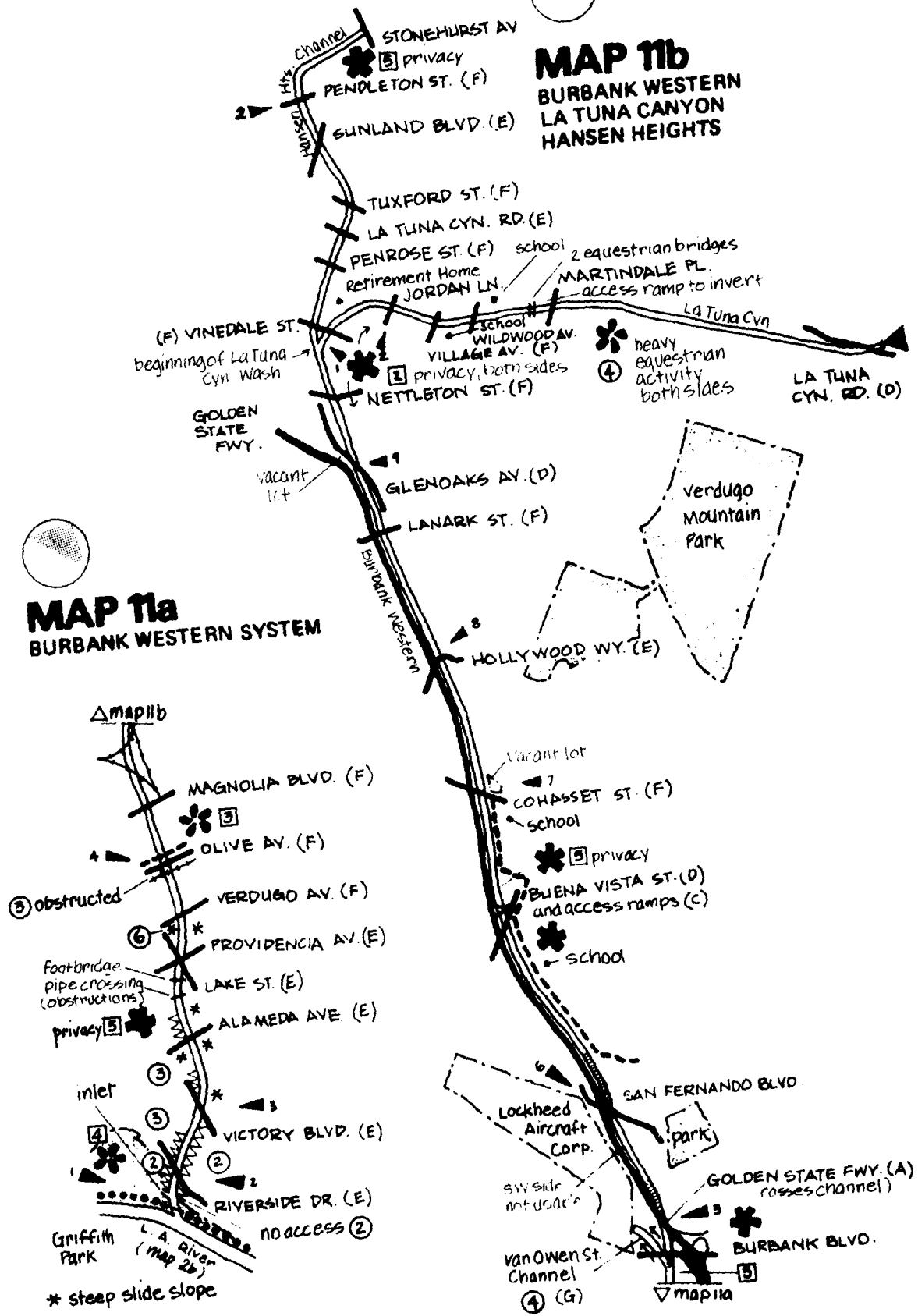
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
9. Glenoaks Blvd to Vinedale St TG 16 F1, 9 F6	Vert. Sides C Bottom C	NE	10' dirt	ROW Channel Yes Yes	SF ②	3	337-338
		SW	10' dirt	Channel Yes ROW Yes	SF ②		

Survey Notes

- Crossings and inlets.
Nettleton St. (G) Light traffic.
Hansen Heights Inlet. Obstructs SW side about halfway between Nettleton and Vinedale.
Vinedale St. (G) Light traffic.
- SF housing, both sides, entire length of reach. 1-8' higher than ROW, separated by concrete block, chain link, wood slats, and vegetation. Inadequate separation in some places.
- Channel becomes La Tuna Can. Wash N of Hansen Hts. confluence.

MAP 11b BURBANK WESTERN LA TUNA CANYON HANSEN HEIGHTS

MAP 11a BURBANK WESTERN SYSTEM



LA TUNA CANYON CHANNEL MAP 11b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Vinedale St. to Jordan Lane 10 4-6	Vert. Sides C Bottom C	E	10' dirt	ROW Yes Channel Yes	SF [2], St.	3	339
		W	10' dirt ①	Channel Yes ROW ③	St., SF [2]		

Survey Notes

- ① Crossings and inlets:
Jordan Lane (G): Light traffic.
- ② SF housing both sides. Level to 3' higher than ROW, separated mostly by chain link and wood slat fencing (letter separation needed). Horses are kept on several of the lots.
- ③ N half fenced at ROW, S half unfenced, lies between channel and paralleling street, used extensively by equestrians and pedestrians.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Jordan Lane to Lebris Basin 10 A-C, S	Vert. Sides C Bottom C	N	20' dirt	ROW Yes Channel Yes	SF [2]	2	340-347
		S	10'-20' dirt ④	Channel Yes ROW Yes	OS [1], SF [2]		

Survey Notes

- ① Crossings:
Village Ave. (G): Light traffic.
Wildwood Ave. (G): Light traffic.
Martindale Pl. (G): Light traffic.
La Tuna Cyn. Rd. (G): Heavy traffic. Road crosses at shallow angle. Channel is covered for 300'. Sufficient room along sides of road for trail. Heavily used by equestrians and bicyclists.
- ② SF housing along N side. Widely scattered SF along S side. Yards level with ROW. Houses separated from ROW by large lots, which are often used for keeping horses or for vegetable gardens. No conflicts likely. Neighbors in this area generally support use of ROW for equestrian trail.
- ③ Verdugo Mtns. adjacent on S side. Steep slopes.
- ④ very heavy equestrian activity in this area. Horses are kept on most of the lots adjacent to the channel in this reach. Numerous equestrian facilities nearby. Many trails in mountains to N and S. Parts of channel ROW are now used by equestrians.

HANSEN HEIGHTS CHANNEL MAP 11b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. La Tuna Cyn. Confluence to Pendleton St. 10 9 15	Vert. Sides C Bottom C	E	12'-18' dirt ②	ROW Yes Channel Yes	SF [3], O [4], St. V	3	338, 348
		W	11'-20' dirt road	Channel Yes ROW Yes	SF [3], O [4], V, I		

Survey Notes

- ① Crossings:
Vinedale St. (G): Light traffic.
Penrose St. (G): Light traffic.
La Tuna Cyn. Rd. (G): Moderately busy.
Tuxford St. (G): Light traffic.
Sunland Blvd. (G): Moderately busy.
Pendleton St. (G): Light traffic.
- ② E access area is not graded for much of reach; very uneven, especially from Vinedale to Penrose. Steep side slopes for much of remaining distance, retaining wall would be needed in places for trail use.
- ③ SF housing is adjacent to the channel for much of the reach. Yards vary from level to 6' above ROW. Chain link fences and vegetation are most often used for separation; there is an 8' concrete block wall on the E side from Penrose to La Tuna.
- ④ Other adjacent uses: E side - abandoned church, retirement home; W side - nursery, church.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Pendleton St. to Stinehurst Ave. 10 9 25	Vert. Sides C Bottom C	W/N	②	ROW Yes Channel Yes	O, [4], SF [5]	3	
		E/S	③	Channel Yes ROW [5]	V, SF [5]		

Survey Notes

- ① Crossings:
Stinehurst Ave. (G): Moderately busy.
- ② W/N side: 12' dirt first half; no access last half (narrow dirt strip between SF and channel).
- ③ 11' dirt first half, 10' paved last half.
- ④ Other adjacent uses: W side - quarry.
- ⑤ Potential privacy conflict: SF housing W side of Stinehurst. Houses 3' higher than ROW. Chain link fence or no separation. Houses use S access road as entry drive.

VERDUGO WASH MAP 12a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Glenoaks Blvd. TG 25 A3 to D2	Vert. Sides C Bottom C	N	None (2)	ROW Channel	No Yes	SF [4], C, I, St	3 349-361
		S	None (3)	Channel ROW	Yes No	SF [4], C, MF, St	

Survey Notes

- (1) Crossings and inlets:
 SPT RR (G)
 San Fernando Rd (G): Busy street
 Concord St. (G): Light traffic.
 Kenilworth Ave. (G): Light traffic.
 Pacific Ave. (G): Light traffic.
 Central Ave. (G): Busy street
 Brand Ave. (G): Busy street.
 Louise Street (u): Light traffic.
 Jackson St. (G): Light traffic.
 Geneva St. (G): Light traffic.
 Sycamore Cyn Inlet
 Glenoaks Blvd. (G): Busy street.
- (2) Much of reach obstructed by Glennaks Blvd
- (3) Reach obstructed by residential and commercial development
- (4) SF housing at same level as channel, but usually screened by vegetation

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Glenoaks Blvd. to Opechee Wy. TG 25 D2 to 18 F5	Vert. Sides C Bottom C	W	None (3)	ROW Channel	No Yes	SF [4] 5	3 362-366
		E	None (3)	Channel ROW	Yes No	SF [4] C, MF	

Survey Notes

- (1) Crossings:
 Mountain St. (G): Light traffic.
 Canada Blvd. (G): Moderately busy street.
 Wabasso Wy. (G): Light traffic.
 Opechee Wy. (G): Light traffic.
- (2) Channel is divided into three sections by walls along bottom.
- (3) Access obstructed by residential and commercial development.
- (4) SF housing directly adjacent to channel, at same level, separated by chain link fencing, vegetation.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Opechee Wy. to Canada Blvd. TG, 18 F5 to F4	Vert. Sides C Bottom C	W	None (2)	ROW Channel	No Yes	SF, [3], V	3 367, 368
		E	None (2)	Channel ROW	Yes No	SF, [3], V, St	

Survey Notes

- (1) Crossings:
 Glorietta Ave. (G): Light traffic.
 Canada Blvd. (G): Moderately busy street.
- (2) Access obstructed by street and/or residential and commercial development.
- (3) SF housing at several locations along reach, partially screened by shrubbery.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Canada Blvd. to Verdugo Debris Basin TG 18 F4 to E3	Vert. Sides C Bottom C	W	15' Dirt (2)	ROW Channel	Yes Yes	SF [3], O [4]	3 370-372
		E	15' Dirt (2)	Channel ROW	Yes Yes	O [4]	

Survey Notes

- (1) Crossings:
 None
- (2) Access restricted along most of reach by Oakmont Country Club. There is an existing 15' access road around the debris dam.
- (3) SF homes are set well back from channel
- (4) Other adj. use: Oakmont Country Club.

VERDUGO WASH MAP 12b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Verdugo Debris Basin to New York Ave. TG 18 E3	Vert. Sides C Bottom S	SW	(2)	ROW Channel	Yes (4) Yes	V, St, SF [6]	4
		SE	(1)	Channel ROW	Yes Yes	St, SF [6]	

Survey Notes

- (1) Crossings and inlets:
 Unnamed street, immediately N of debris basin (u): Light Traffic
 Pickens Creek inlet obstructs NE side
 Shirleyjean St. (6' AG): Light traffic. Ramp descends to invert from SW side, passing under Shirleyjean.
 Whiting Woods Rd (G): Light traffic.
 Eagle Channel inlet obstructs NE side
 New York Ave (u): Light traffic.
- (2) SW side access area: Marginal access S of Shirleyjean (narrow, rough); 12' paved from Shirleyjean to Eagle confluence (bad condition from Whiting Woods to Eagle); 12' dirt from Eagle to New York (150' S of New York used as driveway by adjacent SF).
- (3) NE side access area: No access S of Shirleyjean; 6'-10' dirt from Shirleyjean to near Whiting Woods; 10' paved (bad condition) from S of Whiting Wood to Eagle; 12' dirt N of Eagle; 1' paved S of New York.
- (4) No ROW fence, SW side, from Eagle to New York.
- (5) SF housing, SW side, between Eagle confluence and New York. Yards level with access area, no separation. Potential problem.
- (6) SF housing, NE side: Shirleyjean to Eagle, yards 10' higher than access area, separated by steep slope; from Eagle to New York, yards 6' higher, separated by chain link, potential problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. New York Ave. to Foothill Fwy. TG 18 C1 to 11 C6	Vert. Sides C Bottom C	SW	10'-15' Dirt	ROW Channel Yes ③	OS, SF ④	4	
		NE	10'-15' Dirt ②	Channel ROW Yes ③	OS, SF ④		

Survey Notes

- ① Crossings and inlets:
Dunsmore Canyon inlet obstructs NE side
Dunsmore Ave. (G): Light traffic.
Boston Ave. (G): Moderately busy.
Foothill Fwy. (G): Major obstruction.
- ② Paved from W edge of park to Foothill Fwy.
- ③ Fenced W of park
- ④ SF housing W of park, separated from access area by high, steep slopes

BLANCHARD CANYON CHANNEL MAP 12b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Wash to Elmhurst Dr. TG 11 B6	Vert. Sides C Bottom C	W	②	ROW Channel Yes	SF, OS	3	376-377
		E	②	Channel ROW Yes Yes	SF, OS		

Survey Notes

- ① Crossings:
Foothill Fwy.
La Tuna Cyn. Rd. (G): Moderately busy street.
Elmhurst Dr. (G): Light traffic.
- ② This reach was not surveyed in detail, however, it appears to have at least a 10' access area along both sides.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Elmhurst Dr. to Debris Basin TG 11 B4	Vert. Sides C Bottom C	W	8'-10' Dirt ②	ROW Channel Yes Yes	SF ③, OS	4	378-382
		E	10'-15' Dirt ②	Channel ROW Yes Yes	SF ③, OS		

Survey Notes

- ① Crossings:
Tujunga Cyn. Blvd (G): Moderately busy street.
Foothill Blvd. (G): Busy street.
Haywood St. (G): Light traffic.
Day St. (G): Light traffic.
- ② Access area is 20' paved, each side, between Tujunga Cyn. and Foothill
- ③ SF housing is set back from channel, usually well screened by shrubbery.
- ④ Very attractive scenery, good views, around debris basin.
- ⑤ Channel is very narrow in this reach (about 8').

COOKS CANYON CHANNEL MAP 12b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Wash to Los Olivos Ln TG 11 B4	Vert. Sides C Bottom C	W	③	ROW Channel No Yes	SF		
		E	③	Channel ROW Yes No	SF		

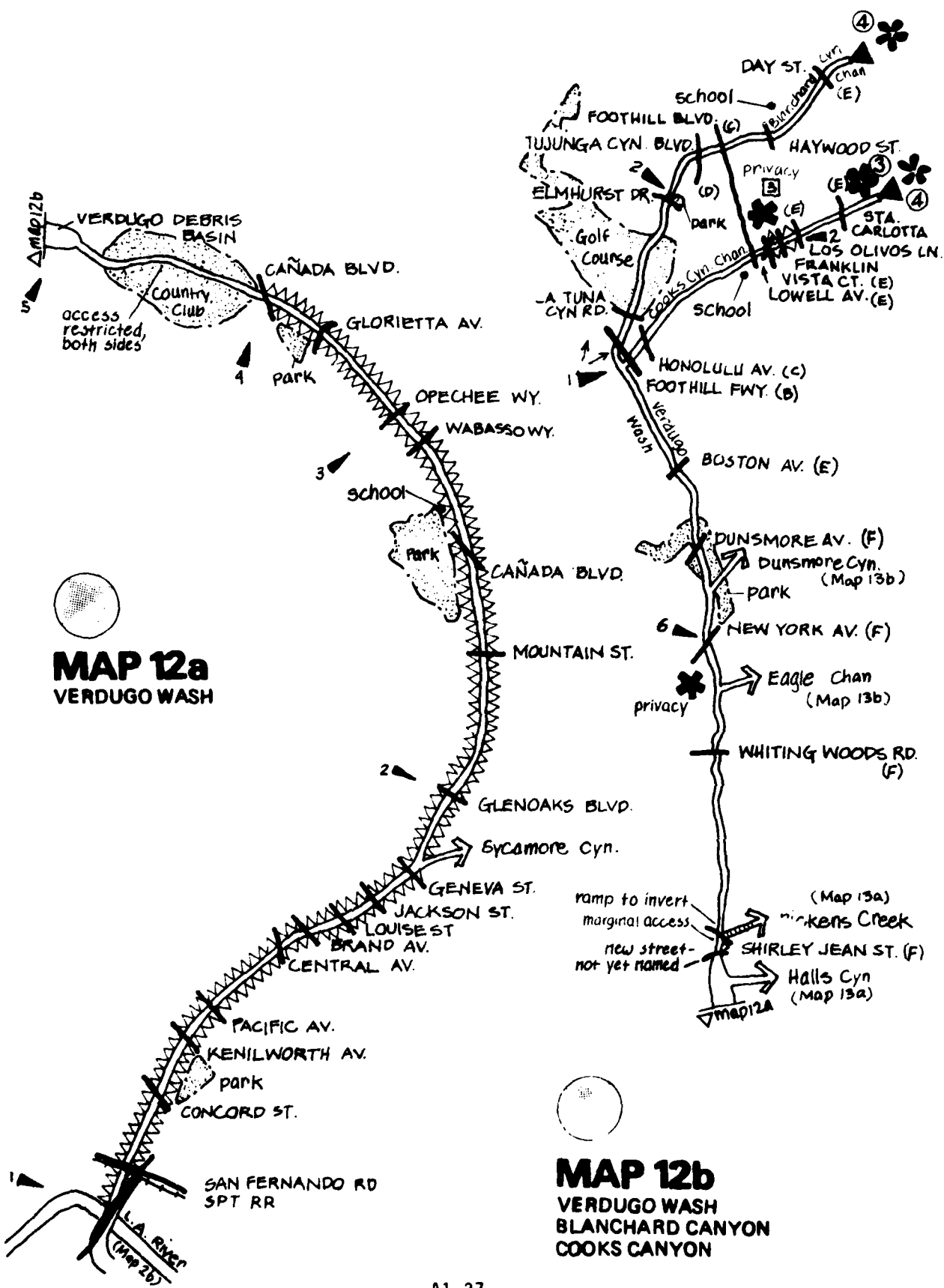
Survey Notes

- ① Crossing:
Foothill Fwy (G)
Hunting Ave. (G): Moderately busy.
Foothill Blvd. (G): Busy street.
Lowell Ave. & Vista Ct. (G): Light traffic.
Main St. (G): Light traffic.
Los Olivos Ln (G): Light traffic.
- ② This reach was not surveyed in detail. There appears to be a 10' ROW along both sides S of Foothill Blvd., and insufficient space for use from Foothill to Los Olivos.
- ③ Channel is very narrow (about 7' wide).

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Los Olivos Ln to Debris Basin TG 11 C4	Vert. Sides C Bottom C	W	10' Dirt	ROW Channel No Yes	SF ②, V	4	373-375
		E	10' Dirt	Channel ROW Yes No	SF ②, V		

Survey Notes

- ① Crossings:
Santa Carlotta St. (G): Light traffic.
- ② SF housing at same level as access area, screened in places by shrubbery. Possible problems.
- ③ Very attractive gorge from Santa Carlotta to Los Olivos. High, steep slopes on sides, large boulders along channel.
- ④ Very attractive scenery, good views, around debris basin.
- ⑤ Channel is very narrow (about 7' wide)



Map 12b

VERDUGO DEBRIS BASIN
Country Club
access restricted, both sides

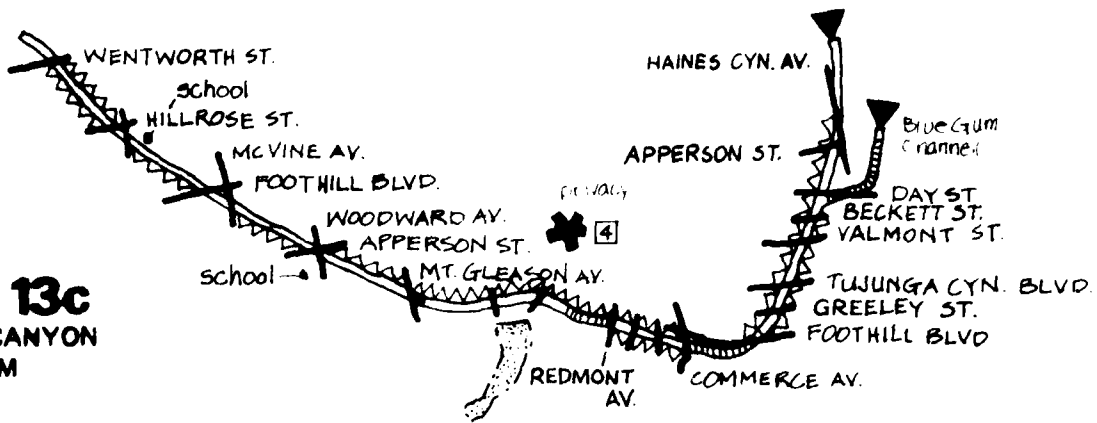
MAP 12a
VERDUGO WASH

SAN FERNANDO RD
SPT RR
L.A. River
(Map 20)

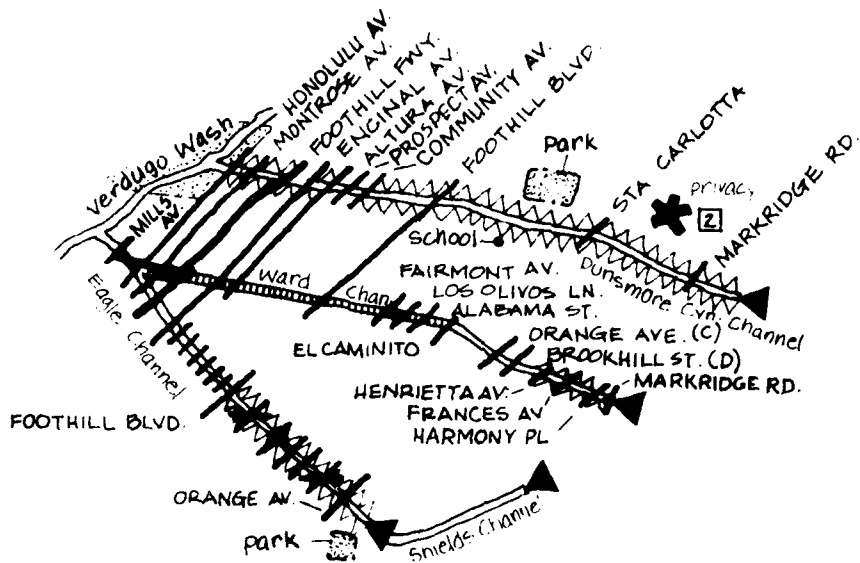
MAP 12b
VERDUGO WASH
BLANCHARD CANYON
COOKS CANYON



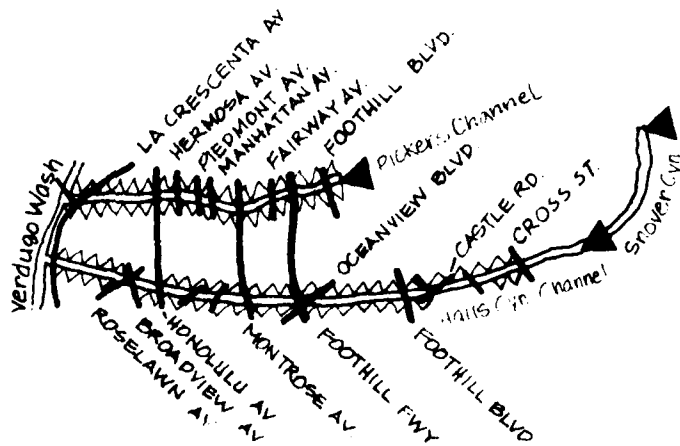
MAP 13c
 HAINES CANYON
 BLUE GUM



MAP 13b
 EAGLE
 SHIELDS
 WARD
 DUNSMORE CANYON



MAP 13a
 PICKENS
 HALLS CANYON
 SNOVER CANYON



NOTE: Channels on Map 13 are not usable for bicycle or equestrian trails because of frequent obstructions and insufficient usable access area. These channels could be used in some places as short neighborhood walkways or linear parks. In these cases, the walks would cross streets at grade, since traffic is generally light. Obstruction ratings are therefore not given for channels on Map 13. Widths given are for usable flat land. In most cases, steeply sloping land alongside could be landscaped to provide a parkway.

PICKENS CHANNEL MAP 13a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Wash to Pickens Debris Basin TG 10 E3	Vert. Sides C Bottom C	W	Intermittent 2	ROW Channel No Channel Yes	SF 3	3	397-407
		E	Intermittent 2	Channel Yes ROW No	SF 3		

Survey Notes

- ① Crossings:
ShirleyJean St. (G): Light traffic.
La Crescenta Ave. (G): Moderately busy.
Honolulu Ave. (G): Busy street.
Hermosa Ave. (G): Light traffic.
Piedmont Ave. (G): Light traffic.
Manhattan Ave. (G): Light traffic.
Montrose Ave. (G): Moderately busy.
Fairway Ave. (G): Light traffic.
Foothill Fwy. (BG 4)
Foothill Blvd. (G): Busy street.
- ② Access area is 5'-15' dirt on each side, interrupted frequently by SF housing that extends to the edge of the channel. Access areas are very steeply sloped in many places and unusable without retaining walls.
- ③ SF housing is usually 5'-10' higher than access area, screened by vegetation.
- ④ Channel crosses over freeway in a box culvert.

HALLS CANYON CHANNEL MAP 13a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Debris Basin to Hall's Debris Basin DG 18 E3 to F1	Vert. Sides C Bottom C	NW	None ③	ROW Channel ⑤ Channel Yes	SF, B, V	3	383-394
		SE	None ④	Channel Yes ROW ⑤	SF, B, V		

Survey Notes

- ① Crossings:
La Crescenta Ave. (G): Moderately busy.
Roselawn Ave. (G): Moderately busy.
Broadview Ave. (G): Light traffic.
Honolulu Ave. (G): Busy street.
Sunset Ave./Hermosa Ave. intersection (G): Light traffic.
Florencita Dr. (G): Light traffic.
Montrose Ave./De Mar Rd. intersection (G): Moderately busy.
Foothill Fwy. (G): Major obstruction.
Ocean View Blvd. (G): Moderately busy.
Foothill Blvd. (G): Busy street. Major obstruction.
Castle Ln./Castle Rd. intersection (G): Light traffic.
Lyans Dr. (G): Light traffic.
Cross St. (G): Light traffic.
- ② Channel is covered between Roselawn and Broadview for 200' and for 250' N of Montrose.
- ③ NW side access area: access area is either nonexistent or narrow and too steeply sloping to be of use, except between Broadview and Honolulu (4'-8' dirt), and N of Cross (4' dirt).
- ④ SE side access area: same as above; not usable except for short dirt strips N of Lyans and N of Cross (4'-8' wide).
- ⑤ Intermittent.

SNOVER CANYON CHANNEL MAP 13a

Not Surveyed

EAGLE CHANNEL MAP 13b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Wash to Eagle Debris Basin Tr. 10 B1 to 11 E5	Vert. Sides E Bottom C	W	None ③	ROW Channel ⑤ Channel Yes	SF, B, V	3	408
		E	④	Channel Yes ROW ⑤	SF, B, V		

Survey Notes

- ① Crossings:
Crossed at grade by 19 streets or intersections. All carry light traffic except Foothill Blvd (Busy street), the Ramsdell/Community intersection, the La Crescenta/El Caminito intersection, and Orange (Moderately busy), and the Foothill Fwy. Foothill Blvd. and the Foothill Fwy. are major obstructions.
- ② Very small channel, about 8' wide.
- ③ W side access area: access is either nonexistent or narrow and too steeply sloping to be of use except for short distances S of Foothill Blvd. (3' dirt) and N of El Caminito (15' dirt).
- ④ E side access area: nonexistent or too narrow and steep to use except in the following places: Hills to Honolulu (3' dirt), Prospect to Ramsdell (6' paved), Mary to N of Foothill Blvd. (6' dirt; Foothill obstructs), and Between La Crescenta and the Debris Basin (15' dirt).
- ⑤ Intermittent.

SHIELDS CHANNEL MAP 13b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Eagle Debris Basin to Shields Debris Basin TG 18 11	Vert. Sides C Bottom C (2)	N	(3)	ROW Channel No	OS	4	
		S	(3)	Channel Yes ROW No	OS		

Survey Notes

- ① Crossing: La Crescenta Ave. (G): Moderately busy.
- ② Narrow channel - about 8' wide.
- ③ Unrestricted access E of La Crescenta (Open Space). 6'-8' dirt either side W of La Crescenta.

WARD CHANNEL MAP 13b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Eagle Confluence to Ward Debris Basin TG 13 D1 to 13DY	Vert. Sides C Bottom C	W	(3)	ROW Channel (5) Yes	SF, V	3	
		E	(4)	Channel Yes ROW (5)	SF		

Survey Notes

- ① Crossings (Above-ground portion of channel only): El Caminito St. (G): Light traffic. Orange Ave. (G): Moderately busy. Brookhill St. (G): Light traffic. Henrietta Ave. (G): Light traffic. Frances Ave. (G): Light traffic. Harmony Pl. (G): Light traffic. Markridge Rd. (G): Light traffic.
- ② Channel is underground from Eagle confluence to El Caminito, and from 40' S of Markridge to the debris basin.
- ③ W side access area: 15' dirt S of Orange, 6'-15' paved from Orange to Brookhill, 3'-8' dirt either side of Harmony. Not usable in other places.
- ④ E side access area: 12'-15' paved from Orange to N of Brookhill, 3' dirt N of Harmony. Not usable in other places.
- ⑤ Intermittent

DUNSMORE CANYON CHANNEL MAP 13b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Verdugo Confluence to Dunsmore Debris Basin TG 18 G1 to 14	Vert. Sides C Bottom C (2)	W	(3)	ROW Channel (5) Yes	SF, C	3	409-412
		E		Channel Yes ROW (5)	SF, C		

Survey Notes

- ① Crossings: Honolulu Ave. (G): Busy street. Montrose Ave. (G): Moderately busy. Foothill Fwy. (G): Major obstruction. Encinal Ave. (G): Light traffic. Allora Ave. (G): Light traffic. Prospect Ave. (G): Light traffic. Community Ave. (G): Light traffic. Foothill Blvd. (G): Busy street. Santa Carlotta St. (G): Moderately busy. Markridge Rd. (G): Light traffic.
- ② Narrow channel - about 6' wide.
- ③ W side access area: Mark comes to edge of channel S of Honolulu; 4' dirt S of Encinal; 4'-8' dirt from S of Allora to Community. Not usable in other places.
- ④ E side access area: Mark comes to edge of channel S of Honolulu; 3'-5' dirt from Encinal to Community. Not usable in other places.
- ⑤ Intermittent

BLUE GUM CHANNEL MAP 13c

Channel is underground from its confluence with Haines Canyon Channel to 100' S of Blue Gum Debris Basin (Photo 417)

HAINES CANYON CHANNEL MAP 13c

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Wentworth St. to Haines Debris Basin TG 10 D2 to 11 A 3	Vert. Sides C Bottom C	N	(2)	ROW Channel (4) Yes	SF, C (5)	3	413-416
		S	(3)	Channel Yes ROW (4)	SF		

Survey Notes

- ① Crossings: Crossed at grade by 23 streets or intersections. All carry light traffic except Foothill Blvd. (Busy street) and Oro Vista, McVine, Woodward/Apperson Intersection, Greeley, and Tujunga (Moderately busy). Foothill Blvd. is a major obstruction.
- ② N side access area: 15' paved from Oro Vista to Foothill, 30' dirt from Foothill to McVine, 12'-15' dirt from McVine to Woodward/Apperson to Mt. Gleason, 10' dirt from Mt. Gleason to Plainview, dirt road adjacent from Plainview to 300' W of McGroarty. No access in other places.
- ③ S side access area: 15' paved road adjacent from Foothill to McVine, 6'-8' dirt from Woodward/Apperson to Mt. Gleason, 10' dirt from Mt. Gleason to Plainview, dirt road adjacent from Plainview to 300' W of McGroarty. No access in other places.
- ④ Intermittent
- ⑤ Small strips of commercial adjacent on N side W of Pinewood and E of McVine.

ARROYO SECO MAP 14a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to San Fernando Rd. TG 35 F5	Vert. Sides C Bottom C, LF	N	③	ROW No Channel yes	Parking	2	88, 418
		S	④	Channel yes ROW No	Parking		

Survey Notes

- ① Crossings:
RR bridge and Ave. 19 (both G): These bridges cross the stream together and constitute a single obstruction. Moderately busy street.
San Fernando Rd. (G): heavy traffic.
- ② Top 9' of E wall is trapezoidal.
- ③ Paved truck ramp from invert to San Fernando
- ④ 10' dirt, very steep (45°). Not usable without retaining wall

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. San Fernando Rd. to Ave. 26 TG 35 F5	Trap. Sides C Bottom C, LF	N	Not usable ②	ROW Yes Channel Yes		2	419, 420
		S	Marginal ③	Channel yes ROW Yes	Maint. yard, v		

Survey Notes

- ① Crossings:
Fwy. ramp support obstructs S side (G).
Ave. 26 (AG): No obstruction.
- ② 10' dirt strip separates channel from fwy. Heavily planted.
- ③ 15' asphalt strip, too steep to use (45°+), from San Fernando to fwy. ramp support. 4' from ramp support to Ave. 26. Large amount of space available for trail use to S between ROW and fwy. ramp.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Ave. 26 to Ave. 43 TG 36 A5	② Sides C Bottom C, LF	N	No access ③	ROW - Channel Yes	F	2	421-426
		S	④	Channel Yes ROW No	F, OS, OS, St		

Survey Notes

- ① Crossings:
Fwy. entrance ramp from 26th St. (6' AG): Obstructs S side.
AT&SF RR (bottom at grade, tracks 10' AG)
Pasadena Ave. (bottom at grade, road 10' AG) Light traffic.
Ave. 43 fwy. exit (G): Bus.
Ave. 43 (G): Moderately busy.
- ② Trap from Ave. 26 to fwy. ramp. Vert. E of ramp to Pasadena. S wall becomes trap E of Pasadena (N wall remains very steep). Channel vert. from just W of Ave. 43 exit to E of Ave. 43.
- ③ Fwy. adjacent to edge of channel on N side.
- ④ S side: 12' dirt from Ave. 26 to fwy. ramp; 10' dirt from ramp to footbridge; 5' dirt from footbridge to RR bridge (steep dirt slope 10'-15' high S of these flat strips); 8' dirt, very steep slope, heavily planted from RR to Pasadena. From Pasadena to Heritage Square 20' dirt, very steep, with 50'-150' flat dirt strip adjacent to S. No access presently through Heritage Square (fenced). 10' dirt, very steep (45°), with 12'-35' dirt strip adjacent to S, from Heritage Square to Ave. 43 ramp. Wide dirt space between ramp and Ave. 43.
- ⑤ Other adjacent use: Heritage Square (Victorian homes restoration project).

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Ave. 43 to Via Marisol Ave. TG 36 B3	Trap. Sides C Bottom C, LF	N	No access ③	ROW - Channel yes	F	4	427-429
		S	④	Channel Yes ROW No	④, park, OS		

Survey Notes

- ① Crossings:
Footbridge 1/4 mile W of Griffen (G to 10' AG): Obstructs S side.
Griffen Ave. (G): Moderately busy.
Via Marisol Ave (G): Moderately busy.
- ② Channel becomes trapezoidal 1/8 mile E of Ave. 43. Remains trapezoidal for remainder of reach except under Griffen and Via Marisol Bridge, where walls are vertical.
- ③ Fwy. adjacent to edge of channel on N side.
- ④ No access for most of first 200 yards E of Ave. 43. 50 yards extend to edge of channel. 10' dirt from beginning of park to footbridge. From footbridge to 250 yards W of Griffen there is a steeply sloping (45°) dirt strip that narrows to 7' for about 250'. Retaining wall would be needed to make any use of this strip. No access last 250 yards W of Griffen (SF to edge of channel). Large natural dirt areas N of Griffen and S of Via Marisol, separated by eighth of a mile with no access (steep hillside comes to edge of channel).

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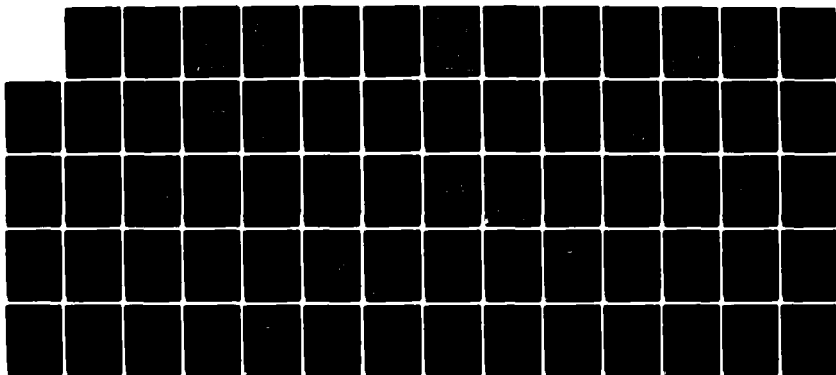
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RECREATION STUDY LOS ANGELES COUNTY DRAINAGE AREA(U)
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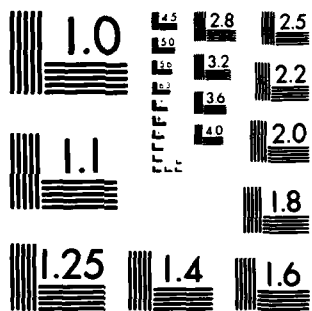
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Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Via Marisol Ave. to San Pasqual Ave. TG 36 C3 to E1	Trap Sides RR 2 Bottom C, LF	N	③	ROW Channel: Yes	Park ③, F, OS	2	430-435
		S		Channel: Yes ROW: No	Park		

Survey Notes

- ① Crossings:
Ave. 60 (AG): Does not obstruct access.
Ave. 60 Fwy access ramp: Does not obstruct access.
AT&SF RR (AG): Does not obstruct access.
Marmon Way (street and fwy. exit ramp) (G): Obstructs S side. Moderately busy.
Pasadena Ave. (AG): Does not obstruct access.
Pasadena Fwy. (AG): Does not obstruct access.
San Pasqual (S) (AG): Obstructs N side only. Light traffic.
- ② Vertical beneath Marmon Way, Pasadena Ave, Pasadena Fwy. and San Pasqual. Sides concrete in vertical sections.
- ③ Park adjacent on N side from Via Marisol to 300' W of Ave. 60. Comes to channel edge. Fwy. adjacent E of park to 100 yds. E of Pasadena. Large open field between fwy. and channel edge from this point to San Pasqual.
- ④ S side access: through park from Via Marisol to Ave. 60 fwy. ramp. 12' paved maintenance road adjacent to channel edge from fwy. ramp to Marmon Way. Through park from Marmon Way to Arroyo Seco Stables. Equestrian trail goes from stable to E under Pasadena Ave. 18' paved road from Pasadena Ave. to driving range. Driving range, parking, tennis courts extend to edge of channel past this point to the fwy. crossing; no access except on park street. Paved street adjacent to channel E of fwy. crossing for 100 yds. equestrian trail adjacent past this point.
- ⑤ Channel invert between Marmon and Pasadena Ave. is used extensively by children - acts as extension of park.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. San Pasqual Ave. to Holly St. TG 26 E6 to E4	Vert. Sides C Bottom C, LF	W	Dirt, 10' min. ③	ROW Channel: No Channel: Yes ②	OS	2	436, 440
		E	Dirt, 10' min. ③	Channel: Yes ② ROW: No ④	SF ④, OS, 0.5		

Survey Notes

- ① Crossings and inlets:
Inlet enters from N side W of San Rafael Ave. Crossed by existing equestrian bridge.
San Rafael Ave. }
La Loma Rd. } These streets all cross well above grade. None obstructs access on either side.
Colorado Blvd. }
Ventura Fwy. }
Holly St. }
- ② The channel is a natural stream and riparian area from the spillway under Colorado Blvd. to about 400' S of Holly St., a distance of about 1,500'. No fencing in this area.
- ③ The Arroyo narrows from San Pasqual to Holly and, except for the stables and the two clusters of SF housing N of San Pasqual and San Rafael, forms a relatively natural gorge with the channel at the bottom and steep slopes on either side. The access width varies considerably on both sides, the minimum useable width being about ten feet. There are large open areas in several places on both sides, some with recreation facilities. Very attractive area, much opportunity for several kinds of use. Includes existing equestrian trail.
- ④ Fenced only along SF housing. SF separated by chain link and wood slat fencing; no conflicts likely.
- ⑤ Other adjacent use: San Pasqual Stables.

ARROYO SECO MAP 14b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Holly St. to Seco St. TG 26 E3	Vert. Sides C Bottom C, LF	W	10' dirt	ROW Channel: No Channel: Yes	OS ②	2	441
		E	10' dirt (Eques. trail)	Channel: Yes ROW: No	OS ②		

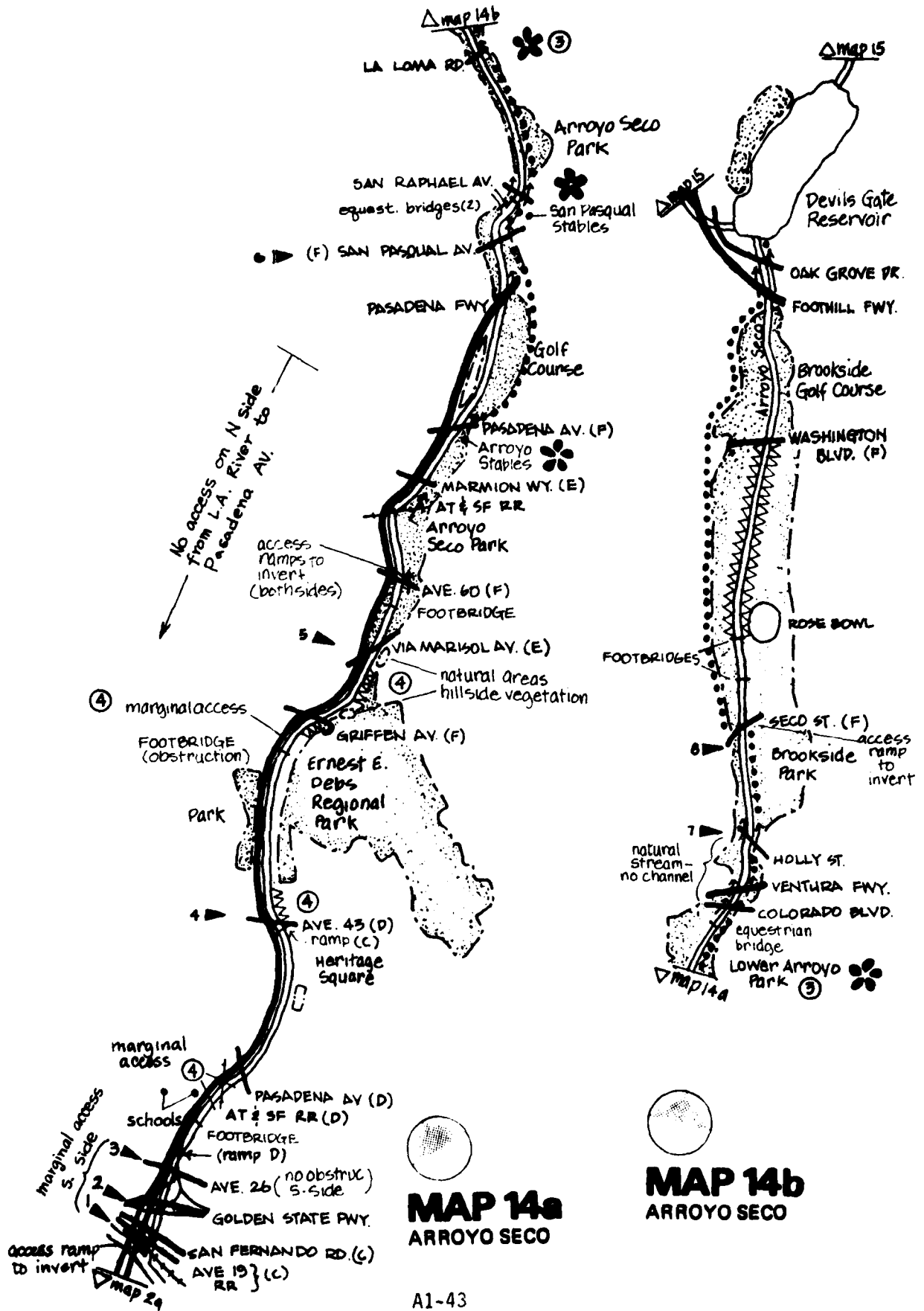
Survey Notes

- ① Crossings:
Seco St. (G): Wide, light traffic.
- ② Steep slopes to N, Brookside Park to S.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
8. Seco St. to Devil's Gate Dam 26 E3 to 19 D5	Trap Sides C Bottom C, LF	W	None ②	ROW Channel: No Channel: Yes	Rose Bowl park ng. golf course.	2	442, 443
		E	None ②	Channel: Yes ROW: No	Rose Bowl park ng. golf course.		

Survey Notes

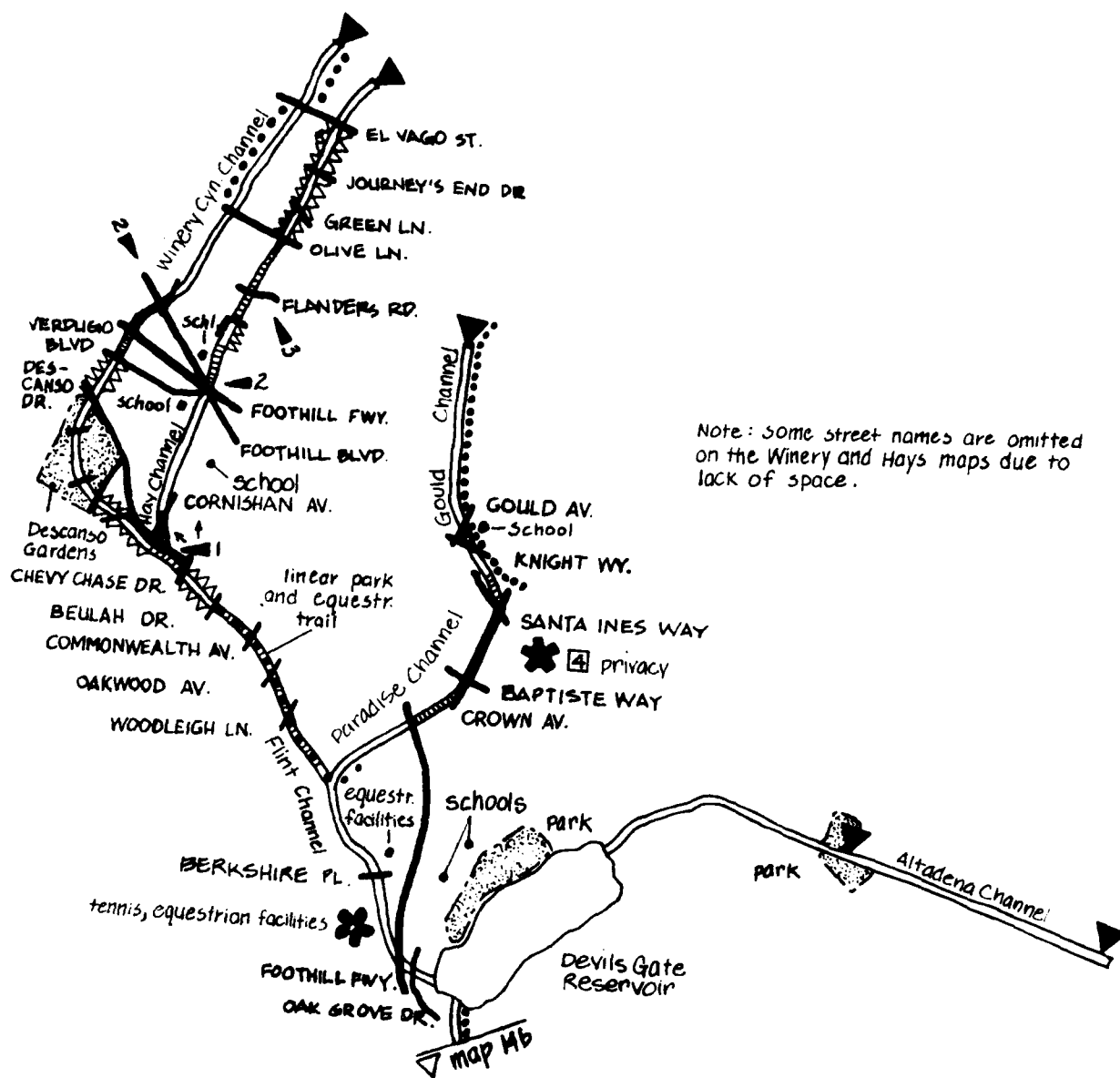
- ① Crossings:
Washington Blvd. (G): Light traffic.
Foothill Fwy. (AG): Does not obstruct access.
Oak Grove Dr. (AG - crosses level with top of dam): Equestrian tunnel provides access on E side
- ② Golf course on both sides of channel to channel edge.



MAP 14a
ARROYO SECO



MAP 14b
ARROYO SECO



Note: Some street names are omitted on the Winery and Hays maps due to lack of space.



MAP 15
 FLINT
 PARADISE
 GOULD
 ALTADENA
 WINERY
 HAY

FLINT CANYON CHANNEL MAP 15

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Foothill Fwy. to Chevy Chase Dr. TG 19 05 to B4	②			ROW Channel	OS, SF	5	
				Channel ROW	OS, SF		

Survey Notes

- ① Crossings:
Foothill Fwy.
Berkshire Pl.
Woodleigh Ln.
Oakwood Ave.
Commonwealth Ave.
Beulah Dr.
Chevy Chase Dr.
- ② There is a natural stream from the recreation area S of Berkshire Pl. to a point near Chula Senda Ln. (does not cross stream). W of this point, the channel is covered to Beulah, and there is a linear park within the channel ROW. Channel is open for a short distance E of Chevy Chase, but there is no usable access. An equestrian trail lies within the ROW E of Beulah.
- ③ The channel was not surveyed in detail.

WINERY CHANNEL MAP 15

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Flint Cyn. Confluence to Foothill Blvd. TG 19 B4	Vert. Sides C Bottom C	SW	②	ROW Channel	No Yes	SF, Descanso Gdns.	4
		NE	②	Channel ROW	Yes No	SF, Descanso Gdns., OS	

Survey Notes

- ① Crossings:
Padres Tr. (G): Light traffic.
Encinas Dr. (G): Light traffic.
N and S entry drives to Descanso Gdns. (G): Light traffic.
Descanso Dr. (G): Moderately busy.
Verdugo Blvd. (G): Busy street.
Foothill Fwy. (G): Major obstruction.
Foothill Blvd. (G): Busy. Major obstruction.
Indian Ave. (G): Light traffic.
- ② Covered or no access from confluence to Descanso Gdns. (SF housing comes to edge of channel). Lawn or landscaping comes to edge of channel in Gardens. SF housing to edge of channel from Descanso Dr. to Verdugo, except for wide open space adjacent to E side of channel N of Descanso. Covered from Verdugo to Indian Ave.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Foothill Blvd to Debris Basin TG 19 B2	Vert. Sides C Bottom C	W	③	ROW Channel	Yes Yes	SF [5], Power ROW	4
		E	④	Channel ROW	Yes Yes	SF [5], Power ROW	

Survey Notes

- ① Crossings:
Indiana Ave. (G): Light traffic.
Olive Ln. (G): Light traffic.
El Vago St. (G): Light traffic.
- ② Narrow channel, about 5' wide.
- ③ W side access area: covered for 150'; 10' dirt from this point to Olive; 10' paved from Olive to debris basin (equestrian trail alongside ROW from Olive to El Vago).
- ④ E side access area covered for 150'; 10' dirt from this point to debris basin (equestrian trail within ROW from El Vago to debris basin).
- [5] SF housing along side opposite power ROW. Level with ROW, potential problems in some places.

HAY CHANNEL MAP 15

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Flint Cyn. Confluence to Foothill Blvd. TG 19 B3	Vert. Sides C Bottom C	W	②	ROW Channel	No Yes	SF, V	3
		E	10' Dirt ③	Channel ROW	Yes Yes	SF [4], S, C	

Survey Notes

- ① Crossings:
Descanso Dr. (G): Moderately busy.
Cornishan Ave. (G): Light traffic.
Foothill Blvd./Verdugo intersection (G): Busy street.
- ② W side access area: covered N of Descanso; no usable access to 200' W of Cornishan; 10' dirt for remainder of distance.
- ③ E side access area: covered N of Descanso; no usable access to Cornishan; 8'-10' dirt from Cornishan to Foothill. Used as path to the school S of Foothill.
- ④ No separation between ROW and houses N of channel to W of Cornishan. Potential problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
Foothill Blvd. to Flanders Rd TG 19 B2	Vert. Sides C Bottom C	W	②	ROW Channel	No Yes	SF	3
		E	②	Channel ROW	Yes No	SF	

Survey Notes

- ① Crossings:
Encinas Dr./Fernside Dr. intersection (G): Light traffic.
Flanders Rd. (G): Light traffic.
- ② Channel is covered for all of this reach except a 500' length S of Encinas, where the access area is generally too steep for use.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Flanders Rd. to Debris Basin TG 19 B1	Vert. Sides C Bottom C ②	W	None ②	ROW Channel	4 Yes	4	453-463
		E	None	Channel ROW	Yes No		

Survey Notes

- ① Crossings and inlets:
Olive Ln. (G): Light traffic.
Inlet obstructs W side access S of Green Ln.
Green Ln. (G): Light traffic.
Journey's End Dr. (G): Light traffic.
El Vago St. (G): Light traffic.
- ② Narrow channel, about 8' wide.
- ③ 15' paved, W side, from El Vago to debris basin.
- ④ Fenced from El Vago to debris basin only.

PARADISE CHANNEL MAP 15

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Flint Confluence to Gould Cyn. Chan. TG 19 C4	①			ROW Channel			
				Channel ROW			

Survey Notes

- ① Paradise Cyn. Channel is underground from Foothill Blvd. to the beginning of Gould Canyon Channel (between Sanja Ines and Gould Ave.). Not surveyed S of Foothill.

GOULD CHANNEL MAP 15

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Paradise Chan. to Gould Debris Basin TG 19 C2	Vert. Sides C Bottom C ②	W	10'-15' Dirt	ROW Channel	Yes Yes	3	
		E	10'-15' Dirt Equest. Trail	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
Knight Way (G): Light traffic.
Gould Ave. (G): Light traffic.
- ② Channel is covered by school yard and parking between Knight and Gould.

ALTADENA CHANNEL MAP 15

Not Surveyed

ALHAMBRA WASH MAP 16a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Rio Hondo Riv. to San Bernardino Fwy. TG 47 A3	Vert. Sides C Bottom C	W	None ②	ROW Channel	- Yes	4	465-469
		E	None ②	Channel ROW	Yes -		

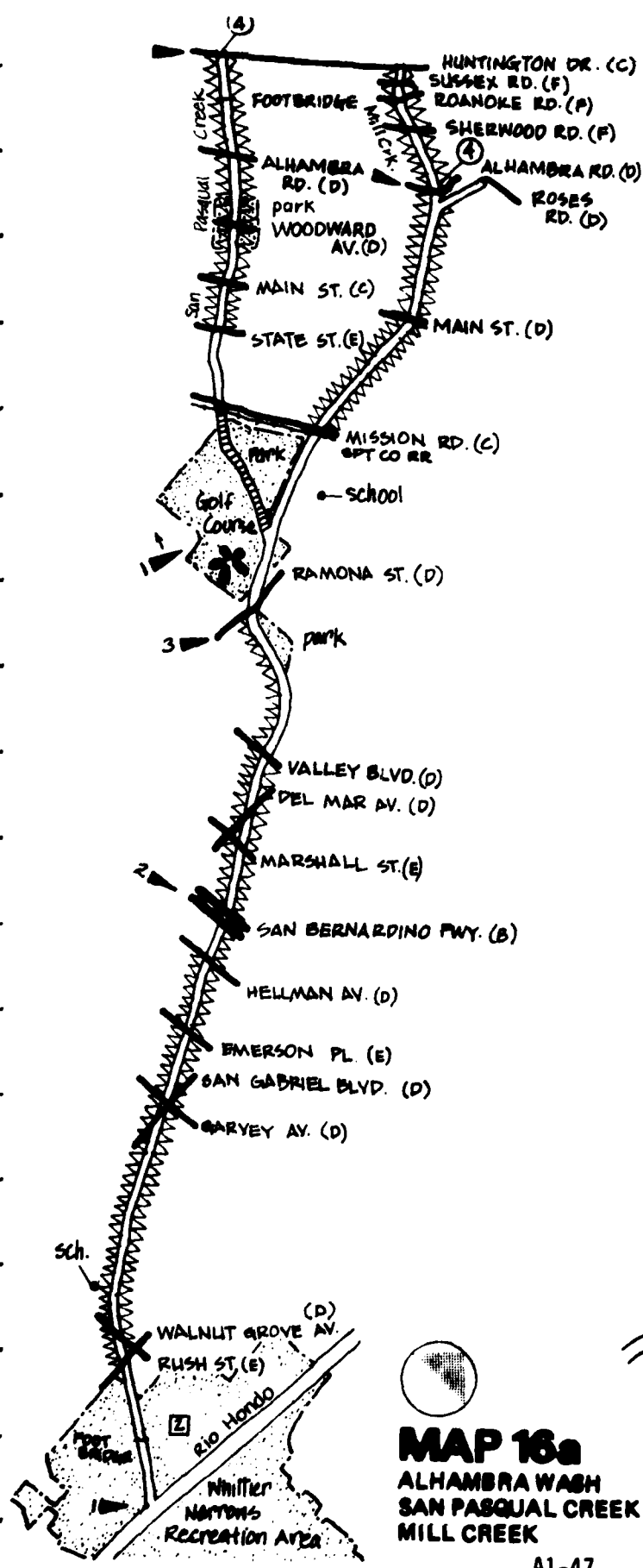
Survey Notes

- ① Crossings:
Walnut Grove (G): Busy street.
Rush St. (G): Moderately busy.
San Gabriel Blvd. (G): Busy street.
Garvey Ave. (G): Busy street.
Emerson Pl. (G): Moderately busy.
Hellman Ave. (G): Busy street.
San Bernardino Fwy. (G): Major obstruction.
- ② Golf course precludes access from Rio Hondo to Walnut Grove, both sides. 15' dirt access road, W side, Hellman to San Bernardino Fwy.

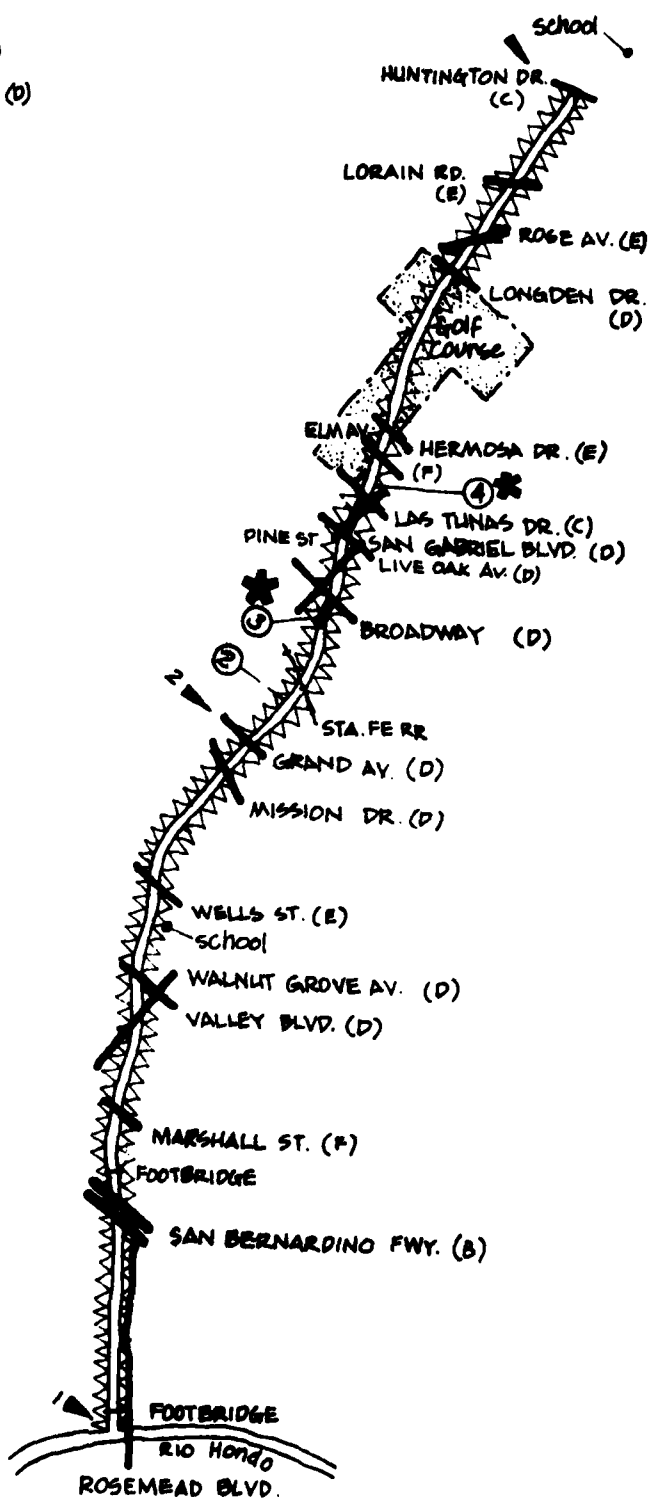
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Ramona St. to Alhambra Rd. TG 37 D4 to D2	Vert. Sides C Bottom C	W	②	ROW Channel	No Yes	3	471-474
		E	③	Channel ROW	Yes No		

Survey Notes

- ① Crossings and inlets:
San Pasqual Creek inlet obstructs W side.
SP RR (G)
Mission Rd. (G): Busy street.
Alhambra Rd. (G): Busy street.
- ② Golf course and park come to edge of channel.
- ③ No defined access area. Open space, school grounds, and park come to edge of channel, providing access.



MAP 16a
 ALHAMBRA WASH
 SAN PASQUAL CREEK
 MILL CREEK



MAP 16b
 RUBIO WASH

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. San Bernardino Fwy. to Ramona St. TG 37 E6	Vert. Sides C Bottom C	W	None	ROW Channel	No Yes	3	470
		E	②	Channel ROW	Yes -		

Survey Notes

- ① Crossings:
 Marshall St. (G): Moderately busy.
 Del Mar Ave. (G): Busy street.
 Valley Blvd. (G): Busy street.
 Ramona St. (G): Busy street.
- ② 15' dirt access road between Valley Blvd and Ramona St.

SAN PASQUAL CREEK MAP 16a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Alhambra Confluence to Huntington Dr. TG 37 (H to C2)	Vert. Sides C Bottom C	W	15' Dirt ②	ROW Channel	No Yes	4	475-477
		E	15' Dirt ②	Channel ROW	Yes No		

Survey Notes

- ① Crossings:
 SPT RR (G)
 Mission Rd. (G): Busy street
 State St. (G): Moderately busy.
 Main St. (G): Busy street.
 Woodward Ave. (G): Busy street.
 Alhambra Rd. (G): Busy street
 Huntington Dr. (G): Busy street.
- ② Covered from confluence to Mission. 15' dirt access area both sides, N of Mission.

MILL CREEK MAP 16a

NOTE: Mill Creek - Map 16a - Not surveyed.

RUBIO WASH MAP 16b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Rio Hondo R. to Grand Ave. TG 47 B1 to 37 F4	Vert. Sides C Bottom C	W	None	ROW Channel	No Yes	3	478-483
		E	None	Channel ROW	Yes No		

Survey Notes

- ① Crossings:
 San Bernardino Fwy. (G): Major obstruction.
 Marshall St. (G): Light traffic.
 Walnut Grove Ave. (G): Busy street.
 Valley Blvd. (G): Very busy.
 Wells St. (G): Moderately busy.
 Mission Dr. (G): Busy street.
 Grand Ave. (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Grand Ave. to Huntington Dr. TG 37 F4 to 37 E1	Vert. Sides C Bottom C	W	None	ROW Channel	No Yes	4	484-490
		E	None	Channel ROW	Yes No		

Survey Notes

- ① Crossings:
 Santa Fe RR (G)
 Broadway (G): Busy street.
 San Gabriel Blvd. (G): Busy street.
 Pine St. (G): Light traffic.
 Live Oak Ave. (G): Busy street.
 Las Tunas Dr. (G): Busy street.
 Elm Ave. (G): Light traffic.
 Hermosa Dr. (G): Moderately busy.
 Lonyden Dr. (G): Busy street.
 Rose Ave. (G): Moderately busy.
 Loran Rd. (G): Moderately busy.
 Huntington Dr. (G): Busy street.
- ② Channel bottom has an abrupt 6' drop in elevation.
 ③ Building spans channel just S of Broadway; major obstruction.
 ④ Building spans channel just N of Las Tunas; major obstruction.

EATON WASH MAP 17a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Rio Hondo Riv. to Rosemead Blvd. TG 38 C6	Vert. Sides C Bottom C	SW	15' Dirt ②	ROW Channel	Yes Yes	3	491-497
		NE	15' Dirt ③	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
 Flair Dr. (G): Moderately busy.
 San Bernardino Fwy. (G): Busy street.
 Loftus St. (G): Moderately busy.
 Valley Blvd. (G): Busy street.
 Santa Fe RR: (G)
 Temple City Blvd. (G): Busy street.
 Lower Azusa Rd. (G): Busy street.
 Encinita Ave. (G): Busy street.
 Rosemead Blvd. (G): Busy street.
- ② No access road on W side of channel between Flair Dr. and San Bernardino Fwy.
- ③ W side access area is paved between the Rio Hondo and Flair Dr., and between Valley Blvd. and the RR. No access S of Lower Azusa; used as drive by adjacent industry.
- ④ SF housing, Loftus to Valley, yards are level with ROW, separated by chain link. Potential problem.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Rosemead Blvd to Duarte Blvd. TG 38 A3	Vert. Sides C Bottom C	SW	②	ROW Channel	Yes Yes	3	498, 499
		NE	②	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
 Broadway (G): Busy street.
 Las Tunas Dr. (G): Busy street.
 Muscatel Ave. (G): Moderately busy.
 Hermosa Dr. (G): Moderately busy.
 Garibaldi Ave. (G): Moderately busy.
 Longden Ave. (G): Busy street.
 Duarte Blvd. (G): Busy street.
- ② 15' paved access road both sides between Muscatel and Duarte. 15' dirt between Broadway and Muscatel.

EATON WASH MAP 17b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Duarte Blvd. to Colorado Blvd. TG 28 A6	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	4	500-504
		E	15' Dirt	Channel ROW	Yes ②		

Survey Notes

- ① Crossings:
 Huntington Dr. (G): Busy street.
 California Blvd (G): Busy street.
 Pasqual St. (H): Moderately busy.
 Del Mar Blvd. (G): Moderately busy.
 Colorado Blvd (G): Moderately busy.
- ② E ROW fenced only between Huntington and Colorado.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
4. Colorado Blvd. to Eaton Dam TG 27 F3	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	SF, OS	4	905-511
		W	15' Dirt	Channel ROW	Yes No	V, OS		

Survey Notes

- ① Crossings and inlets:
Foothill Fwy. (AG)/Foothill Blvd. (G): Fwy. crosses the channel over Foothill Blvd. Foothill Blvd. has heavy traffic.
Orange Grove Blvd. (G): Busy
Sierra Madre Villa channel inlet obstructs E side access.
Sierra Madre Blvd. (G): Busy street.
- ② Channel is covered by a car lot between Colorado and Foothill Fwy.
- ③ Good views of foothills to N and E.

SIERRA MADRE VILLA CHANNEL MAP 17b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Eaton Wash to Debris Basin TG 27 F2 to 28 A1	Vert. Sides C Bottom C			ROW Channel Channel ROW			

Survey Notes

- 1 Covered by Sierra Madre Blvd. from slightly E of Eaton Wash to slightly W of Sierra Madre Villa Ave. Golf course comes to the edge of channel, both sides, for remainder of reach.

FAIR OAKS STORM DRAIN MAP 17b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
1. New York Dr. to Altadena Dr. TG 20 F6	Trap. Sides C Bottom C	W	None	ROW Channel	- Yes	St, SF	3	
		E	None	Channel ROW	Yes -	SF, St		

Survey Notes

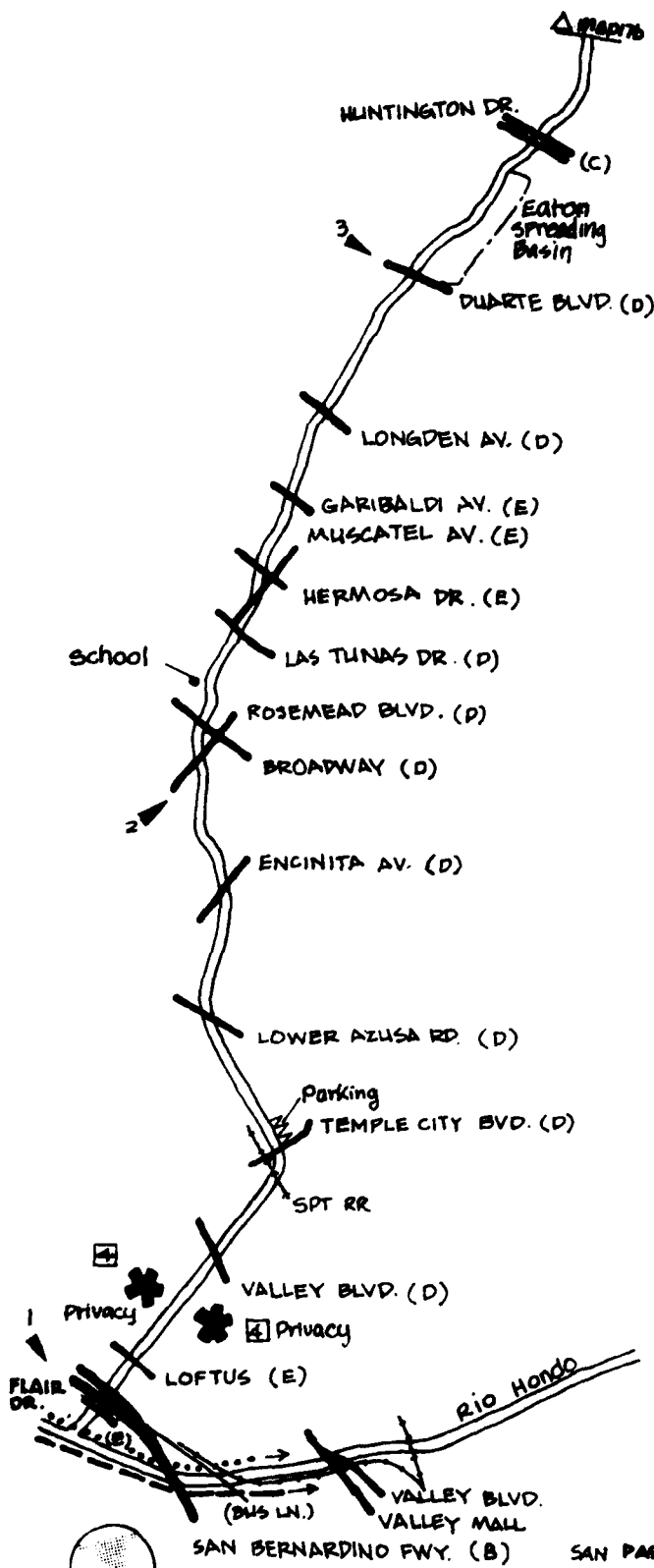
Fair Oaks Storm Drain is a 6'-8" wide trapezoidal channel no more than 3'-4" deep with no separate ROW. It is bounded on one side by a street and on the other by residences. Many private driveways cross the small channel, and it is underground at street intersections.

RUBIO DIVERSION MAP 17b

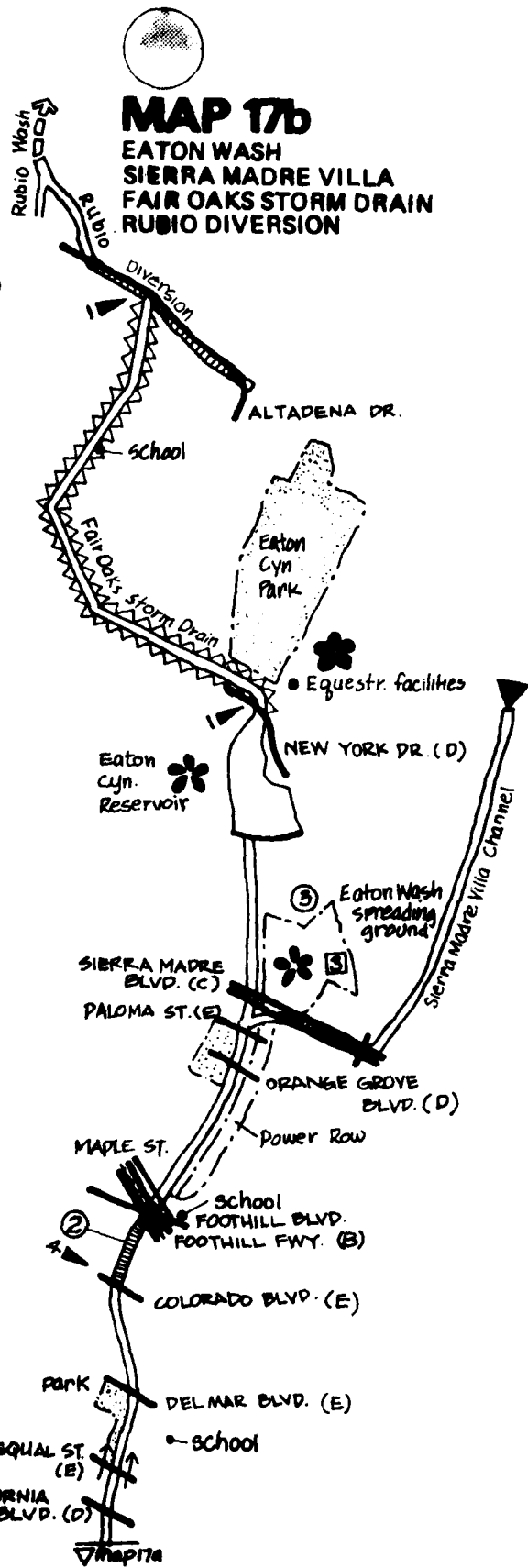
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
1. Rubio Wash Confluence to Altadena Dr. TG 20 D2	Vert. Sides C Bottom C	N		ROW Channel	No Yes			
		S		Channel ROW	Yes No			

Survey Notes

Channel is entirely covered by Altadena St. except for a 1,400'-long section E of the Rubio Wash confluence.



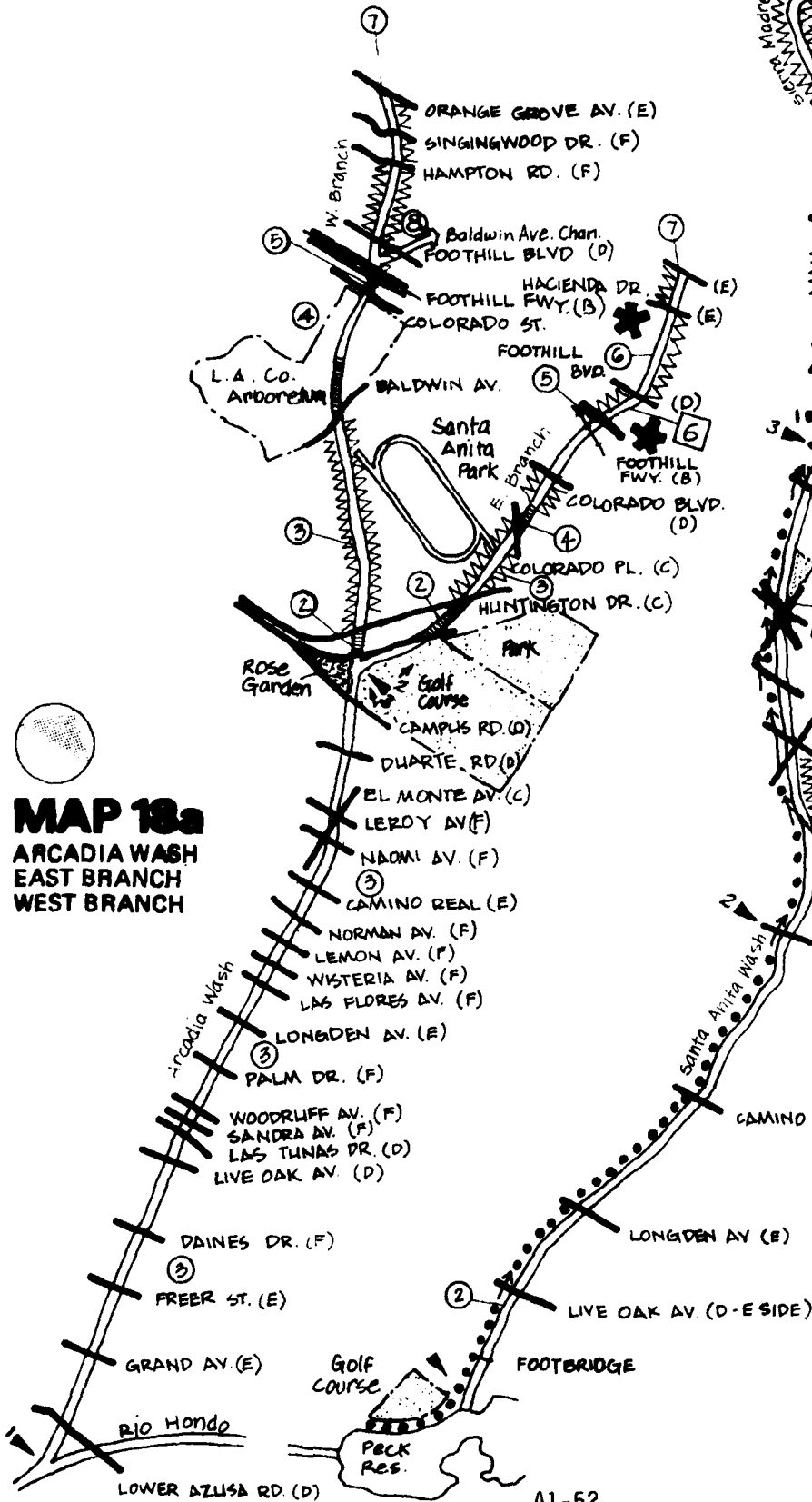
MAP 7a
EATON WASH



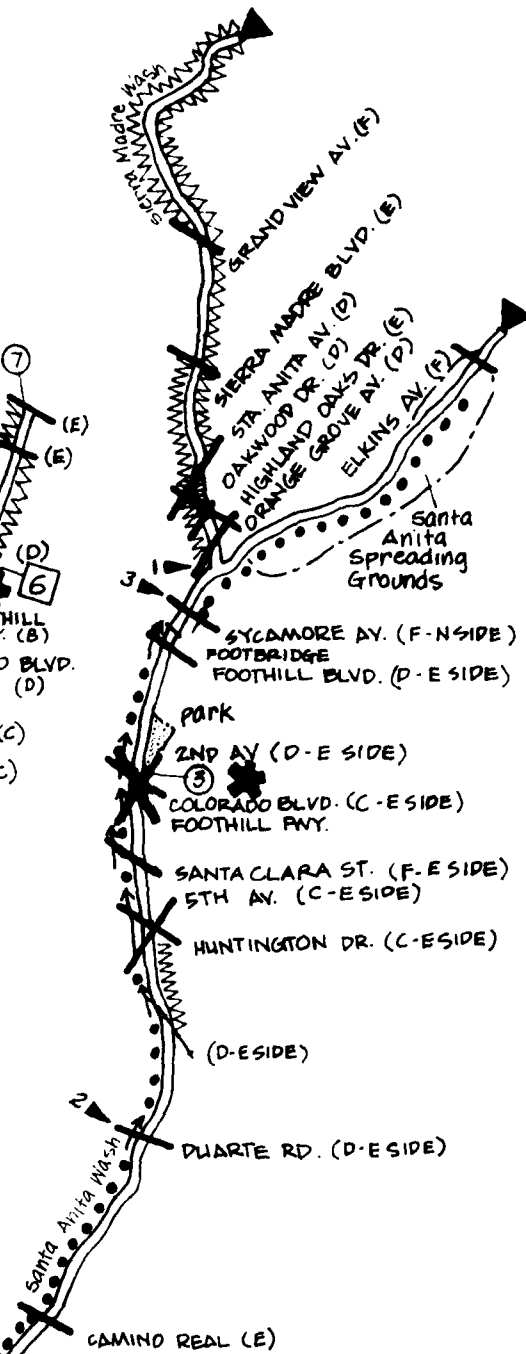
MAP 7b
EATON WASH
SIERRA MADRE VILLA
FAIR OAKS STORM DRAIN
RUBIO DIVERSION



MAP 18a
 ARCADIA WASH
 EAST BRANCH
 WEST BRANCH



MAP 18b
 SANTA ANITA WASH
 SIERRA MADRE WASH



ARCADIA WASH MAP 18a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Rio Hondo Riv. to Confluence IG JB E4 - 2B D6	Vert. Sides C Bottom C	W	15'-30' Dirt 2	ROW Channel Yes	C, SF	4	513-519
		E	15'-20' Dirt	Channel ROW Yes	L, SF		

Survey Notes

- ① Crossings:
 Lower Azusa Rd. (G): Busy street.
 Grand Ave. (G): Moderately busy.
 Freer Street (G): Moderately busy.
 Daines Dr. (G): Light traffic.
 Live Oak Ave. (G): Busy street.
 Las Tunas Dr. (G): Busy street.
 Sandra Ave. (G): Light traffic.
 Woodruff Ave. (G): Light traffic.
 Palm Dr. (G): Light traffic.
 Lungden Ave. (G): Moderately busy.
 Las Flores Ave. (G): Light traffic.
 Wisteria Ave. (G): Light traffic.
 Lemon Ave. (G): Light traffic.
 Norman Ave. (G): Light traffic.
 Camino Real (G): Moderately busy.
 Naomi Ave. (G): Light traffic.
 El Monte Ave. (G): Busy street.
 Leroy Ave. (G): Light traffic.
 Duarte Rd. (G): Busy street.
 Campus Rd. (G): Busy street.
- ② 15' paved access road between Leroy and Duarte, W side
- ③ Access restricted N of Campus by golf course on E and rose garden on W

ARCADIA WASH EAST BRANCH MAP 18a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Arcadia Confluence to Orange Grove IG 2B D5	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel Yes	C, SF	4	524-528
		E	15' Dirt	Channel ROW Yes	C, SF		

Survey Notes

- ① Crossings:
 Huntington Dr. (G): Busy street.
 Colorado Place (G): Moderately busy.
 Colorado Blvd (G): Busy street.
 AT&SF RR (G)
 Foothill Fwy. (G)
 Foothill Blvd. (G): Busy street.
 Hacienda Dr. (G): Moderately busy.
 Orange Grove Ave. (G): Moderately busy.
- ② Access road covered by civic offices between E and W lanes of Huntington.
- ③ Channel runs through parking lot of Santa Anita Race Track.
- ④ Channel is covered for 100' beyond Colorado.
- ⑤ Channel is covered between RR tracks and Foothill Fwy.
- ⑥ Inadequate fencing at rear yards of residences to assure privacy from traffic users
- ⑦ Not surveyed N of Orange Grove.

ARCADIA WASH WEST BRANCH MAP 18a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Arcadia Confluence to Orange Grove IG 2B D5	Vert. Sides C Bottom C	W	None ⑥	ROW Channel Yes	C, OS, SF	4	520-523, 529
		F	None	Channel ROW Yes	C, OS, SF		

Survey Notes

- ① Crossings:
 Huntington Dr. (G): Busy street.
 Baldwin Ave. (G): Busy street.
 Colorado St (G): Busy street.
 Foothill Fwy. (G): Busy street.
 Old Ranch Rd. (G): Light traffic.
 Foothill Blvd. (G): Busy street.
 Hamilton Rd. (G): Light traffic.
 Singingwood Dr. (G): Light traffic.
 Orange Grove Ave. (G): Moderately busy.
- ② Channel is covered by a parking lot between E and W lanes of Huntington.
- ③ Channel runs through the parking lot of the Santa Anita Race Track.
- ④ Access restricted by County Arboretum.
- ⑤ Channel is covered between Colorado and Foothill Fwy
- ⑥ 10' access road between Hamilton and Orange Grove on W side.
- ⑦ Channel is underground N of Orange Grove.
- ⑧ Baldwin Ave. channel enters under Foothill Fwy. Channel remains underground to the N.

SANTA ANITA WASH MAP 18b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
1. Peck Reservoir to Duarte Rd. TG 38 F3	② Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	OS, SF	3	530-534
			15' Dirt	Channel ROW	Yes Yes	SF		

Survey Notes

- ① Crossings:
 Live Oak Ave. (4): Very busy.
 Longtin Ave. (1): Moderately busy.
 Camino Real (4): Moderately busy.
 Duarte rd. (4): Busy street.
- ② Channel changes from trap to vert. 100' south of Live Oak.
- ③ Equestrian trail is adjacent to channel ROW, not within.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
2. Duarte Rd. to Sycamore Ave. TG 28 E5	Vert Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	M, C, SF	3	535-543
		E	15' Dirt (3)	Channel ROW	Yes Yes	SF, C, OS, SF		

Survey Notes

- ① Crossings:
 AT & SF RR (G)
 Huntington Dr./5th Ave. intersection (G): Busy street.
 Santa Clara St. (G): Light traffic.
 2nd St. (G): Busy street.
 Colorado Blvd. (G): Busy street.
 Foothill Blvd. (G): Busy street.
 Sycamore Ave. (G): Light traffic.
- ② Access road stops 100' before Foothill Fwy. A narrow (10' max.) easement continues under Fwy. bridge but stops at Colorado.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
3. Sycamore Ave. to Debris Basin TG 28 E3	Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	SF, OS	4	544-547
		E	15' Dirt	Channel ROW	Yes Yes	SF, OS		

Survey Notes

- ① Crossings and Inlets:
 Sierra Madre Wash inlet obstructs W side.
 Elkins Ave. (G): Light traffic.

SIERRA MADRE WASH MAP 18b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs	
1. Santa Anita Confluence to Debris Basin TG 28 L3	Vert Sides C Bottom C	W	None 2	ROW Channel	- Yes	SF	4	550-551
		E	None	Channel ROW	Yes -	SF		

Survey Notes

- ① Crossings and inlets:
 Highland Oaks Dr. (G): Light traffic.
 Oakwood Dr. (G): Light traffic.
 Orange Grove Ave. (G): Busy street.
 Santa Anita Ave. (G): Busy street.
 Sierra Madre Blvd. (G): Moderately busy
 Grand View Ave. (G): Light traffic.
 Numerous small crossings between Grand View and debris basin (G): Light traffic.
- ② W side: no access except 10' dirt from Sierra Madre to Grand View.

BUENA VISTA CHANNEL MAP 19a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Sawpit Wash to Spreading Basin TG 39 B1	Trap. Sides C Bottom C	N	②	ROW No Channel ③	OS, I	3	566-568
		S	10'-15' Dirt	Channel No ROW No	OS, I		

Survey Notes

- ① Crossings:
Buena Vista St. (G): Moderately busy.
- ② N side access area: 15' dirt road and Van Meter St. provide access W of Buena Vista, interrupted by SF houses that extend to edge of channel.
- ③ Intermittent.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Spreading Basin to Duarte Rd. TG 39 C1	Trap. Sides C Bottom C	N/W	②	ROW Yes Channel No	I, V	2	569-572
		S/E	③	Channel No ROW Yes	I, OS, SF		

Survey Notes

- ① Crossings:
Buena Vista St. (G): Moderately busy.
Duarte Rd. (G): Busy street.
- ② N/W side access area: 15' dirt first 2/3 of reach; 12' paved last third.
- ③ S/E side access area: 12' dirt first 2/3 of reach; no access last third (SF housing to edge of channel).

SAWPIT WASH MAP 19b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Peck Reservoir to Live Oak Ave. TG 39 A2	Vert. Sides C Bottom P	E	15'-25' Dirt	ROW Yes Channel Yes	OS, I	2	552-555
		W	15' Dirt	Channel Yes ROW Yes	NS, St		

Survey Notes

- ① Crossings:
Peck Rd. (G): Busy street
Live Oak Ave. (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Live Oak Ave. to Buena Vista Confluence TG 39 A2	Vert. Sides C Bottom C	E	②	ROW 4 Channel Yes	I	2	555
		W	③	Channel Yes ROW 4	St		

Survey Notes

1. Crossings and inlets:
London Ave. (G): Moderately busy.
Buena Vista Channel inlet obstructs east side.
- 2) E side access: no access from Live Oak to London. Access area has a side slope, is heavily planted with trees. 15' dirt from London to Buena Vista confluence.
- 3) W side access: no access from 300' N of London to 600' N of London. Street comes to edge of channel. 15' dirt past this area.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Buena Vista Confluence to Duarte Rd. TG 29 B6	Vert. Sides C Bottom C	E	15' Dirt	ROW Yes Channel Yes	I	2	
		W	15' Dirt	Channel Yes ROW Yes	St		

Survey Notes

- ① Crossings:
Shrode St. (G): Light traffic.
Euclid Ave. (G): Light traffic.
Duarte Rd. (G): Busy street.

SAWPIT WASH MAP 19b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Duarte Rd. to Central Ave. TG 29 C5	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel Yes Yes	1	1	556
		E	None	Channel ROW Yes Yes	1		

Survey Notes

- (1) Crossings:
 1785' RR (G)
 Building over channel (G)
 Evergreen St. (G) Moderately busy.
 Foothill Fwy. (G)
 Central Ave. (G) Moderately busy.
- (2) Covered 250' N of Duarte Rd. - Resurfaces N of Central Ave.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Central Ave. to Royal Oaks Dr. TG 29 C5	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel Yes Yes	1	1	557-560
		E	15' Dirt	Channel ROW Yes Yes	1		

Survey Notes

- (1) Crossings:
 Huntington Dr. (G) Busy street
 Mountain Ave. (G) Busy street.
 Old RR Bridge (No longer in use) (G)
 Royal Oaks Dr. (G) Moderately busy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Royal Oaks Dr. to Norumbega Rd. TG 29 C4	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel Yes Yes	OS (Park), SF [2]	3	561, 562
		E	15' Dirt	Channel ROW Yes Yes	SF [2], S		

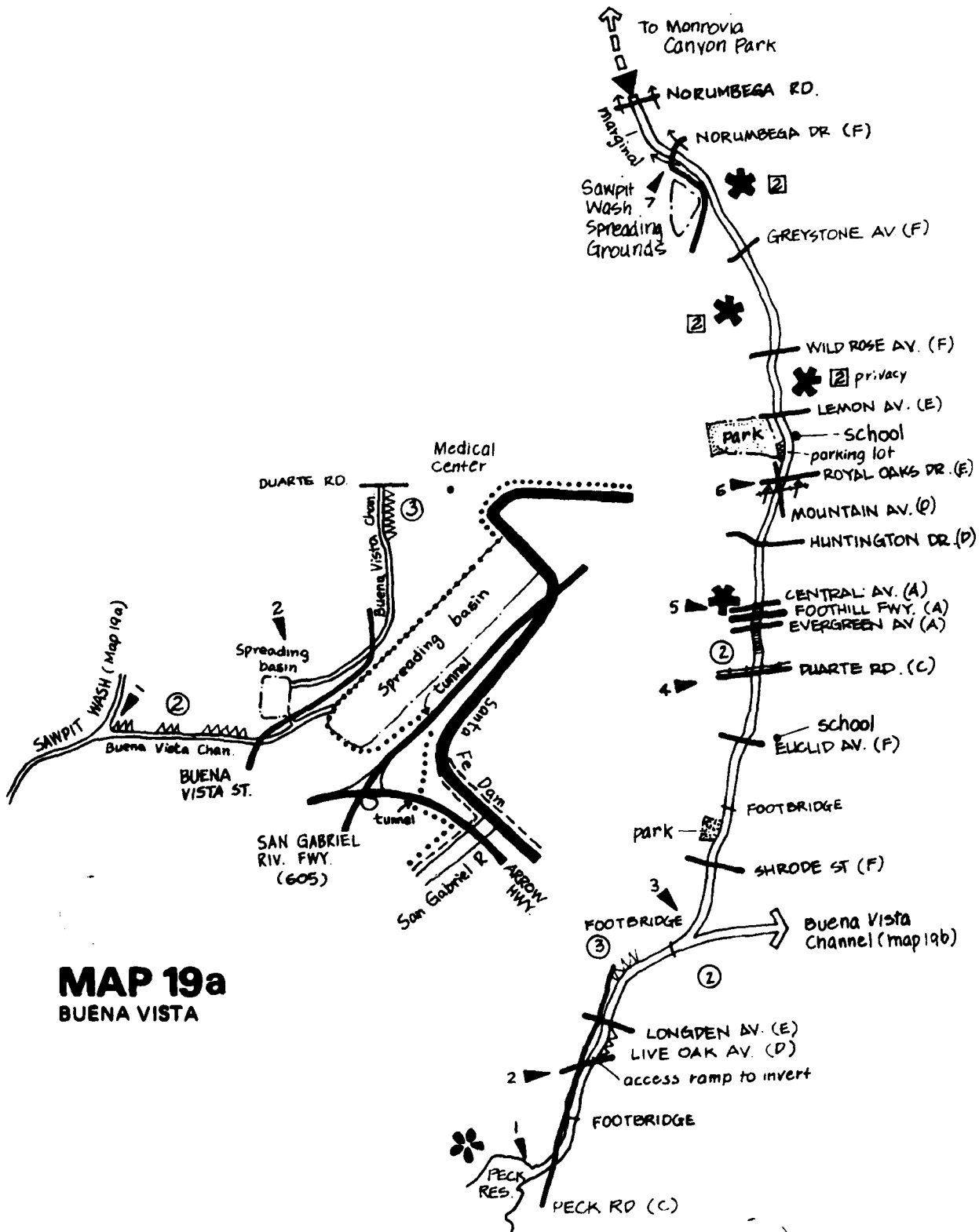
Survey Notes

- (1) Crossings:
 Lemon Ave. (G) Light traffic.
 Wild Rose Ave. (G) Light traffic.
 Firestone Ave. (G) Light traffic
 Norumbega Rd. (G) Light traffic
- (2) The rear yards of residences are level with the service road and existing chain link fencing permits direct viewing.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Norumbega Rd. to Sawpit Dam TG 29 B1	Vert. Sides C Bottom C	W	None	ROW Channel No Yes	OS	2	563, 564
		E	15' Dirt	Channel ROW Yes No	OS		

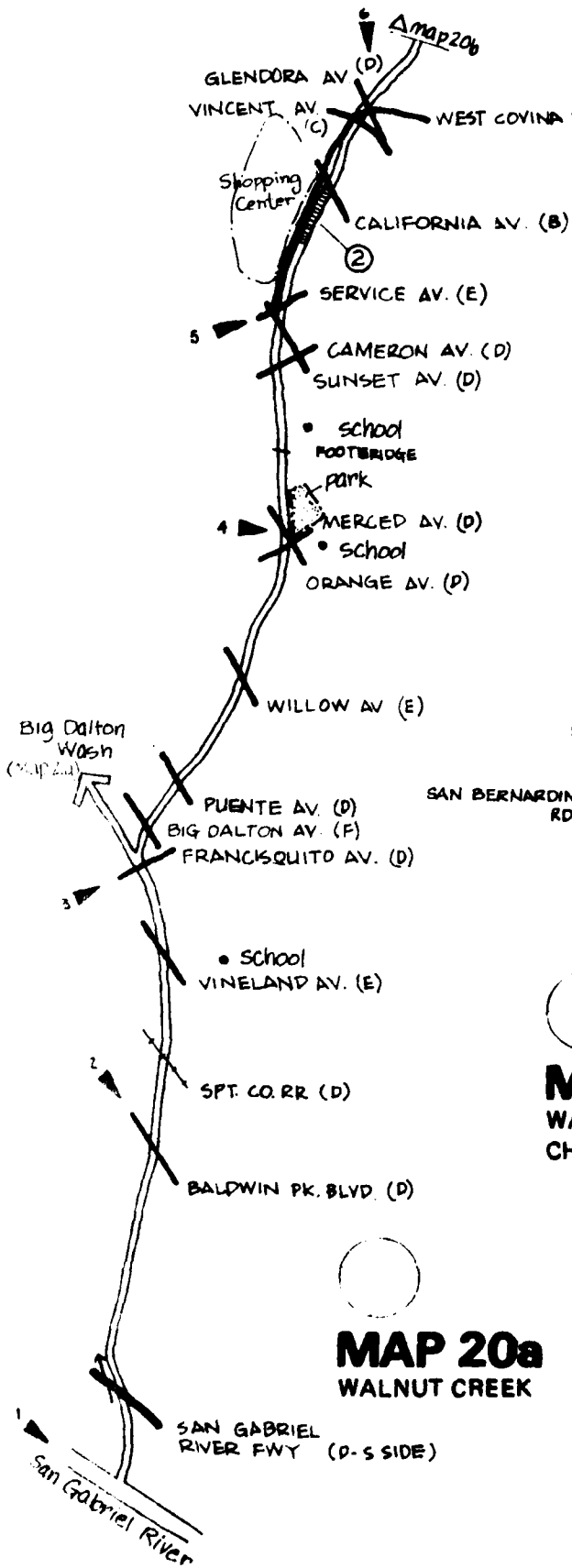
Survey Notes

- (1) Crossings:
 None



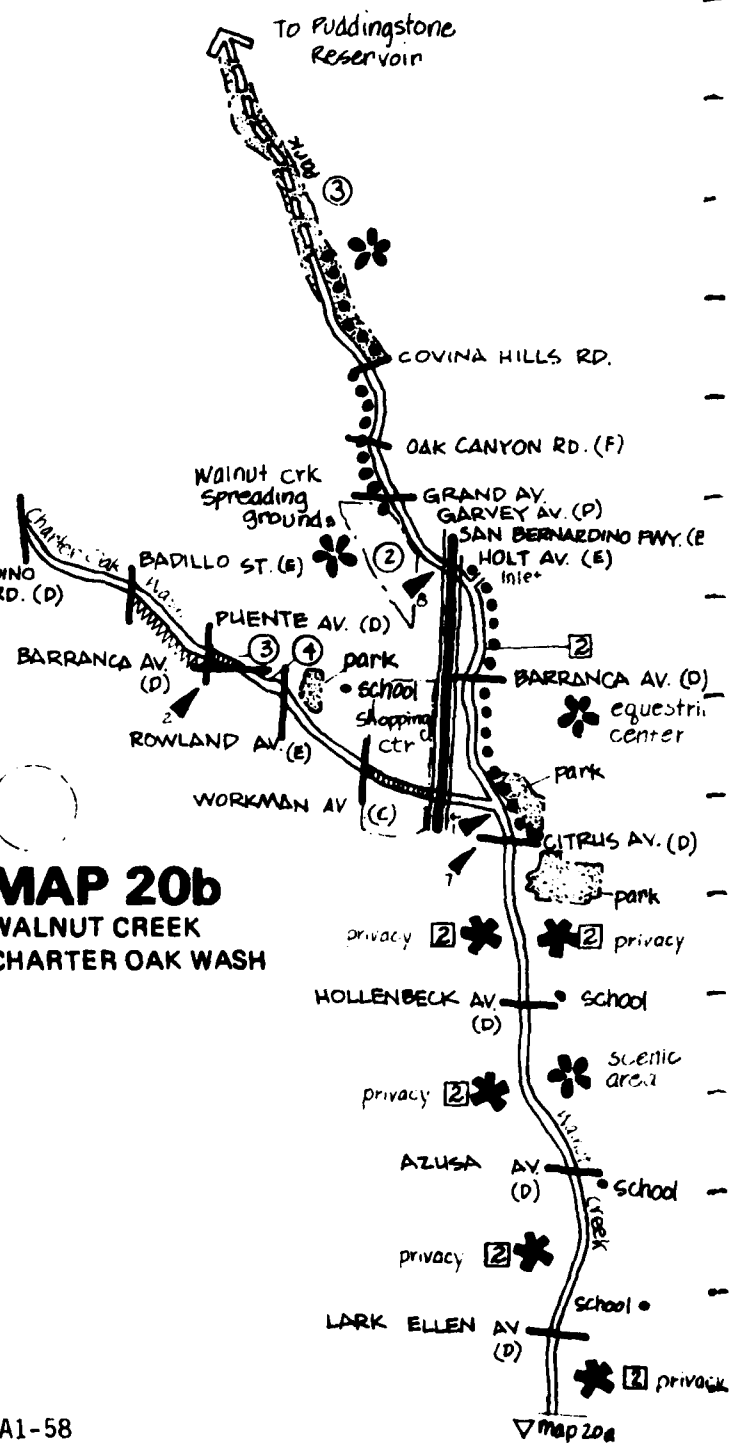
MAP 19a
BUENA VISTA

MAP 19b
SAWPIT WASH



MAP 20a
WALNUT CREEK

MAP 20b
WALNUT CREEK
CHARTER OAK WASH



MAP 20a

WALNUT CREEK MAP 20a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. San Gabriel Riv. to Baldwin Park Blvd TG 48 B1	Trap. Sides HR Bottom U	N	15' Dirt	ROW Yes Channel No	SF	2	576-579
		S	20' Dirt	Channel No ROW No	OS, I		

Survey Notes

- (1) Crossings:
San Gabriel River Hwy (A);
Baldwin Park Blvd (G) Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Baldwin Park Blvd to Francisquito Ave. TG 48 D1	Vert. Sides C Bottom C	N	15' Dirt	ROW Yes Channel Yes	SF, V	2	
		S	15' Dirt	Channel Yes ROW Yes	I, SF, (C), S		

Survey Notes

- (1) Crossings:
SPT RR (G)
Vineland Ave. (G) Moderately busy.
Francisquito Ave. (G) Busy street

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Francisquito Ave. to Merced Ave. TG 48 E1-F1	Vert. Sides C Bottom C	N	20' Paved	ROW Yes Channel Yes	SF	3	580-582
		S	20' Paved	Channel Yes ROW Yes	SF, I, S		

Survey Notes

- (1) Crossings and inlets:
Big Dalton Wash inlet obstructs N side.
Big Dalton Ave. (G) Moderately busy.
Puente Ave. (G) Busy street.
Willow Ave. (G) Moderately busy.
Merced Ave. (G) Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Merced Ave. to Service Ave. TG 88 A1	Vert. Sides C Bottom C	N	15' Dirt	ROW Yes Channel Yes	SF, V, C	3	583, 584
		S	15' Dirt	Channel Yes ROW Yes	St, OS, C, S		

Survey Notes

- (1) Crossings:
Orange Ave. (G) Busy street.
Cameron Ave. (G) Busy street.
Sunset Ave. (G) Busy street.
Service Ave. (G) Light traffic.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Service Ave. to Glendora Ave. TG 92 B1	Vert. Sides C Bottom C	N	15' Dirt	ROW Yes Channel Yes	C	3	585-587
		S	15' Dirt	Channel Yes ROW Yes	SF, V, C		

Survey Notes

- (1) Crossings:
California Ave. (G) Moderately busy.
Glendora Ave./M. Covina Parkway intersection (G) Busy street.
Vincent Ave./M. Covina Parkway intersection (G) Busy street.
(2) Parking lot covers channel.

WALNUT CREEK MAP 20b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Glendora Ave. to Citrus Ave. TG 92 C1-E1	Vert. Sides C Bottom C	N	15' Dirt	ROW Yes Channel Yes	SF (2), OS	4	587-592
		S	20' Dirt	Channel Yes ROW Yes	SF (2), S		

Survey Notes

- (1) Crossings:
Lark Ellen Ave. (G) Busy street.
Azusa Ave. (G) Busy street.
Hollenbeck St. (G) Busy street.
Citrus Ave. (G) Busy street.
(2) Housing adjacent on both sides, level with ROW. Inadequate separation to insure privacy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Citrus Ave. to Garvey Ave. TG 92 F1	Vert. Sides C Bottom C	N	15' Dirt	ROW Channel	Yes Yes	C	593-597
		S	15' Dirt	Channel ROW	Yes Yes	CS, MF, V	

Survey Notes

- ① Crossings and inlets:
Charter Oak inlet obstructs W side.
Barranca St. (G): Busy street.
Inlet obstructs access on S side W of inlet.
Holt Ave. (G): Light traffic.
San Bernardino Hwy. (G): Major obstruction.
Garvey Ave. (G): Moderately busy.
- ② Fast Hills Equestrian Trail: Lies S of access road.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
8. Garvey Ave to Beginning of Channel TG 99 A6	Vert. Sides C Bottom C	N	15' Dirt	ROW Channel	Yes Yes	C, OS, MI, OS, SF	4
		S	15' Dirt	Channel ROW	Yes Yes	V, C, MI, OS, SF	

Survey Notes

- ① Crossings:
Grand Ave. (G): Busy street.
Oak Cyn. Rd. (G): Light traffic.
Covina Hills Rd. (G): Light traffic.
- ② "Walnut Creek Fishing Hole" is located in spreading grounds W of Grand Ave.
- ③ Walnut Creek is a natural stream E of the channel. Flows through Walnut Creek Park, which extends E to the Foothill Fwy.

CHARTER OAK WASH MAP 20b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Walnut Creek to Puente Ave. to BB F1	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	V, C, MF	3
		E	15' Dirt	Channel ROW	Yes Yes	V, C, SF, OS	

Survey Notes

- ① Crossings:
Holt Ave. (G): Light traffic.
San Bernardino Hwy. (G): Major obstruction.
Garvey Ave. (G): Moderately busy.
Workman Ave. (G): Busy street.
Rowland Ave. (G): Light traffic.
Barranca Ave. (G): Moderately busy.
Puente Ave. (G): Moderately busy.
Radillo St. (G): Light traffic.
San Bernardino Rd. (G): Moderately busy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Puente Ave. to Beginning of Channel to BB F1	Vert. Sides C Bottom C	W	20' Dirt (1)	ROW Channel	Yes Yes	SF, MF	2
		E	15' Dirt	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
Radillo St. (G): Light traffic.
- ② Channel is underground from 100' S of San Bernardino Rd. to N.
- ③ N of Radillo only.

NOTE: Single family housing constitutes much of the land use adjacent to the Big Dalton Wash. Adjacent yards are usually level with the channel ROW, and separated by chain link fencing and vegetation. Comments on single family housing are included in the notes on this channel only in cases where a potential problem is thought to exist.

BIG DALTON WASH MAP 21a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Walnut Creek to Ladillo St. TG 48 L1	Vert. Sides C Bottom C	NW	15' dirt	ROW Channel	Yes Yes	2	609
		SE	15' dirt	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
Dalewood St., the San Bernardino Fwy., and Garvey Ave. all cross the channel at grade in approximately the same location, and the three together constitute one major obstruction. Dalewood and Garvey carry heavy traffic.
Merced Ave. (G) Moderately busy.
Pacific Ave. (G) Moderately busy.
Badillo St. (G) Very busy.
- ② SF housing, both sides, level with ROW. Separated primarily by chain link and vegetation. Potential privacy problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Radillo St. to Azusa Cyn. Rd TG 33 F5	Vert. Sides C Bottom C	NW	15' dirt	ROW Channel	Yes Yes	2	610-612
		SE	15' dirt	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings:
Puente Ave. (G) light traffic.
Ramona Blvd. (G) Very busy.
SPT. CO. RR (G)
Los Angeles St. (G) Moderately busy.
Azusa Cyn. Rd. (G) Very busy.
- ② Old Quarry Pit: potential recreational use/rest stop.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Azusa Cyn. Rd. to Vincent Ave. TG 88 A4	Vert. Sides C Bottom C	NW	15' dirt	ROW Channel	Yes Yes	2	613-614
		SE	15' dirt	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings and inlets:
SPT CO. RR (G)
Cypress St. (G) Moderately busy.
Irwindale Ave. (G) Very busy.
Vincent Ave. (G) Moderately busy.
Little Dalton Wash: Inlet obstructs access on NW side.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Vincent Ave. to Citrus Ave. TG 88 FJ	Vert. Sides C Bottom C	NW	15' dirt	ROW Channel	Yes Yes	3	615-616
		SE	15' dirt ②	Channel ROW	Yes Yes		

Survey Notes

- ① Crossings and inlets:
San Dimas Wash: Inlet obstructs access on SE side.
Lark Ellen Ave. (C) Moderately busy.
Azusa Ave. (G) Very busy.
Arrow Hwy. (G) Very busy.
Cerritos Ave. (G) Very busy.
Citrus Ave. (G) Very busy.
- ② SE access width is 100' between Cerritos and Citrus (includes power line ROW).

BIG DALTON WASH MAP 21b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Citrus Ave. to Glendora Ave. TG 88 E2	Vert. Sides C Bottom C	NW	15'-20' dirt ②	ROW Channel	Yes Yes	3	617-620
		SE	15'-20' dirt ②	Channel ROW	Yes Yes		

Survey Notes

① Crossings:

Gladstone St. (G): Very busy.
 Barranca Ave. (G): Very busy.
 Grand Ave. (G): Very busy.
 Glendora Ave. (G): Very busy.
 Foothill Frey. (AG): Does not obstruct access on either side.

② SE access width is 100' from Citrus to Gladstone. NW access width is 100' from Gladstone to Grand. Both include power line ROW.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Glendora Ave. to Alosta Ave. TG 89 A1	Vert. Sides C Bottom C	NW	15' dirt	ROW Channel	Yes Yes	4	--
		SE	15'-20' dirt	Channel ROW	Yes Yes		

Survey Notes

① Crossings:

Mauna Loa Ave. (G): Light traffic.
 Alosta Ave. (G): Very busy.

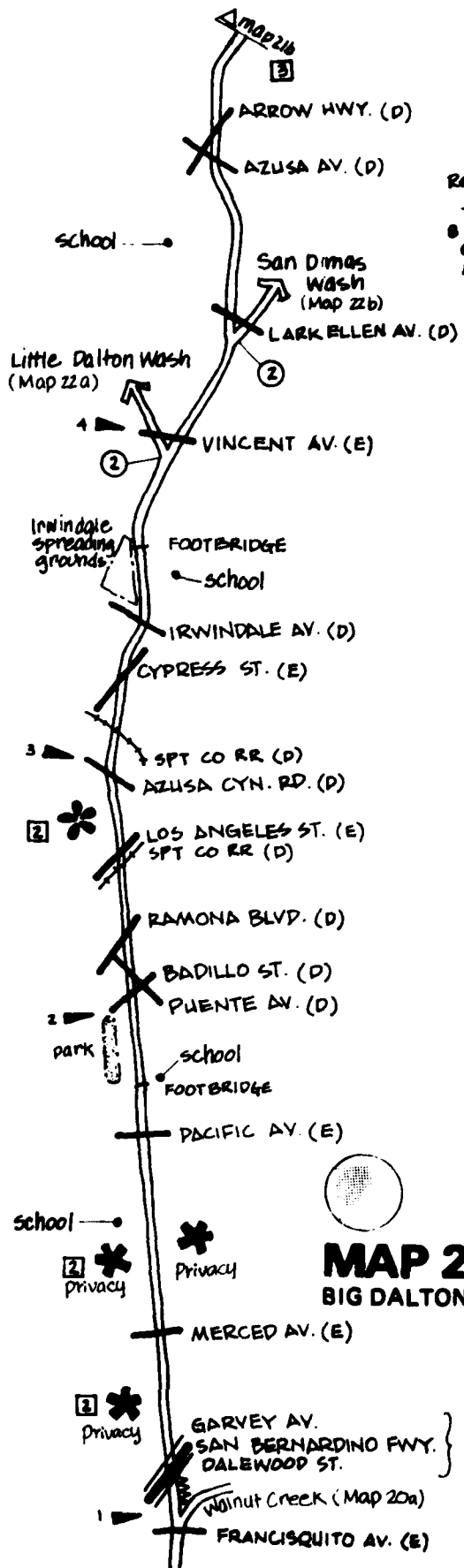
② Park is a major destination for trails in this area.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Alosta Ave. to Glendora Mt. Rd. TG 87 C6	Vert. Sides C Bottom C	W	15' dirt	ROW Channel	Yes Yes	3	621-631
		E	20' dirt	Channel ROW	Yes Yes		

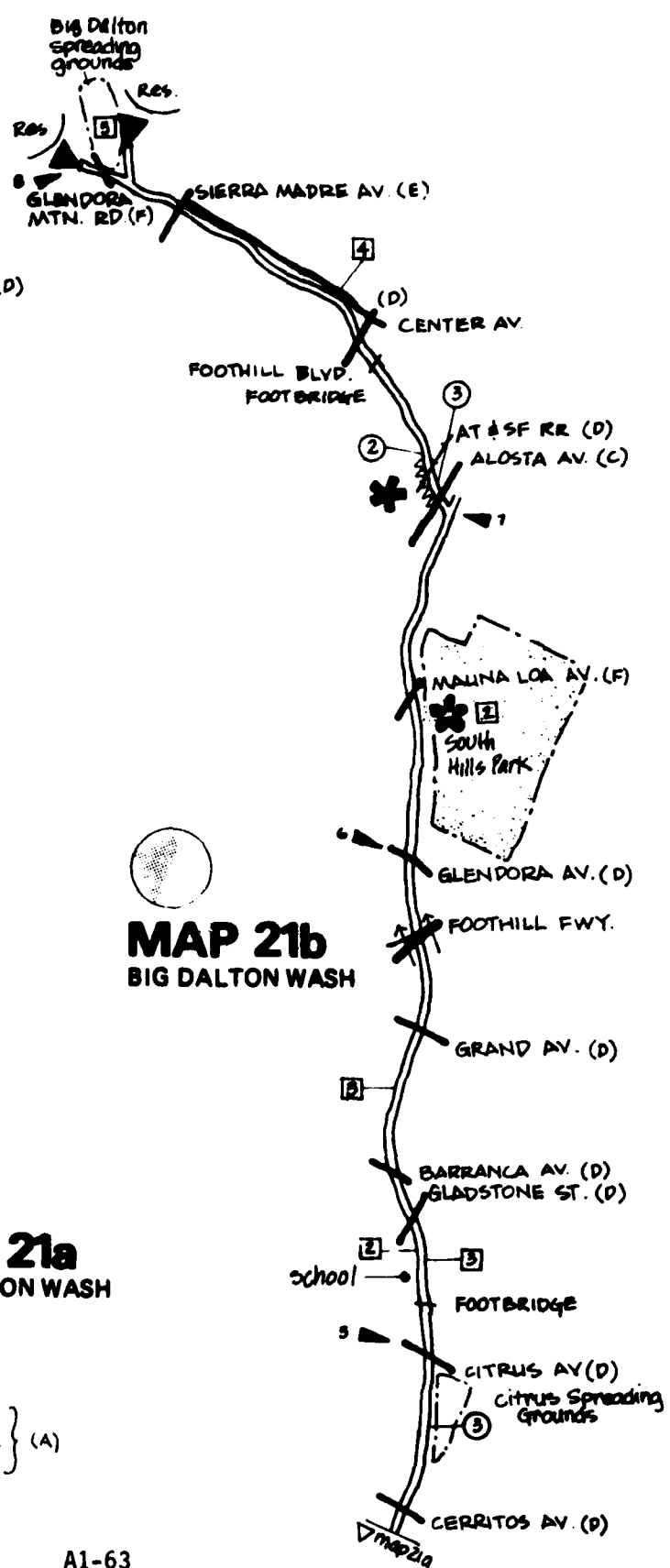
Survey Notes

① Crossings and Inlets:

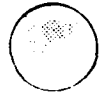
Morgan Channel inlet: Not a significant obstruction. Goes underground after a short distance, and can be gone around easily.
 AT & SF RR (G)
 Foothill Blvd. (G): Very busy.
 Sierra Madre Ave. (G): Moderately busy.
 Glendora Mt. Rd. (G): Light traffic.
 Inlet obstructs access on E side S of Glendora Mt. Rd.



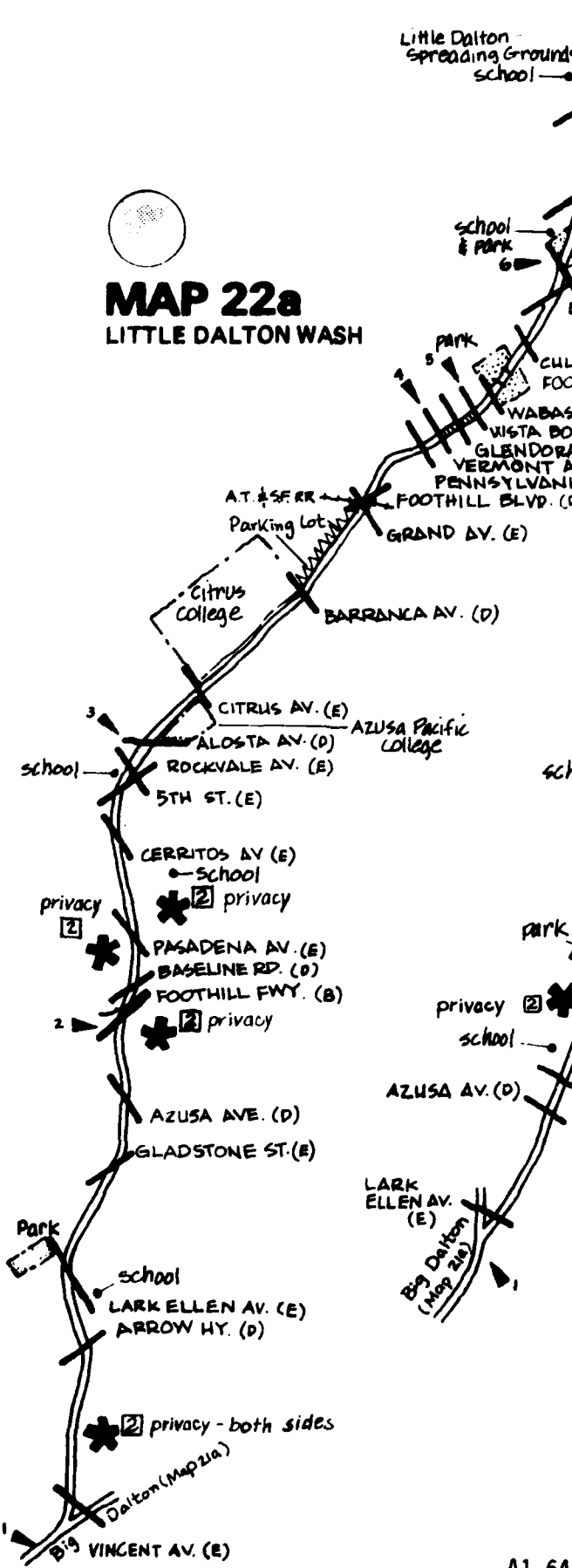
MAP 21a
BIG DALTON WASH



MAP 21b
BIG DALTON WASH



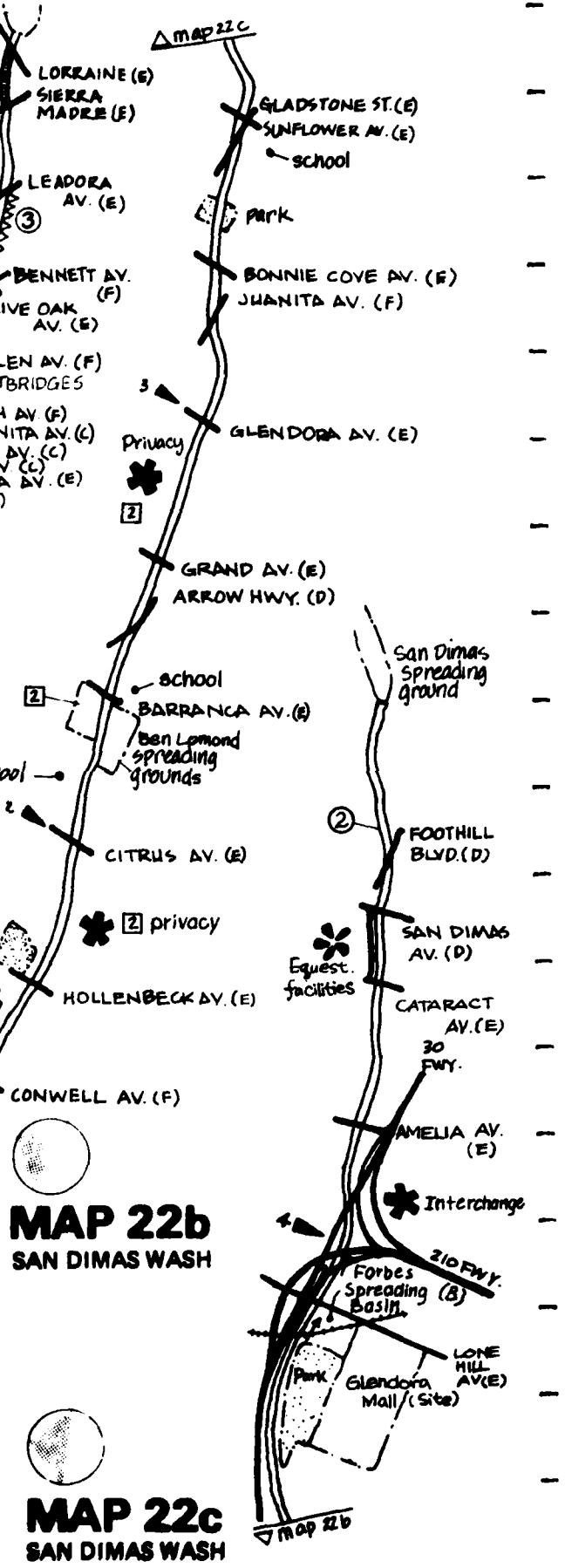
MAP 22a
LITTLE DALTON WASH



MAP 22c

MAP 22b
SAN DIMAS WASH

MAP 22c
SAN DIMAS WASH



MAP 22b

LITTLE DALTON WASH MAP 22a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Big Dalton Wash to Foothill Fwy. TG AB B3	Vert. Sides C Bottom C	NW	15' Dirt	ROW Channel Yes	SF [2]	2	632-634
		SE	15' Dirt	Channel ROW Yes	SF [2], MF		

Survey Notes

- (1) Crossings:
 Vincent Ave. (G): Moderately busy.
 Arrow Hwy. (G): Busy street.
 Lark Ellen Ave. (G): Busy street.
 Gladstone St. (G): Moderately busy.
 Azusa Ave. (G): Busy street.
 Foothill Fwy. (G): Major obstruction.
- (2) SF housing, both sides; yards are level with ROW, separated only by chain link fence. Potential problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Foothill Fwy. to Acosta Ave. TG NH DJ to Ub E6	Vert. Sides C Bottom C	NW	15' Dirt	ROW Channel Yes	SF [2], MF, V	3	634-635
		SE	15' Dirt	Channel ROW Yes	SF [2], C, S, V		

Survey Notes

- (1) Crossings:
 Baseline Rd. (G): Busy street.
 Pasadena Ave. (G): Moderately busy.
 Lerritas Ave. (G): Moderately busy.
 Fifth St. (G): Moderately busy.
 Rockvale Ave. (G): Moderately busy.
 Acosta Ave. (G): Busy street.
- (2) SF housing, both sides; yards are level with ROW, separated only by chain link fence. Potential problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Acosta Ave. to Vermont Ave. TG Bb Eb r5	Vert. Sides C Bottom C	N	15' Dirt (2)	ROW Channel Yes	SF, S, C	3	636
		S	15' Dirt (3)	Channel ROW Yes	S, MF, C		

Survey Notes

- (1) Crossings:
 Citrus Ave. (H): Moderately busy.
 Barranca Ave. (G): Busy street.
 Grand Ave. (G): Moderately busy.
 Foothill Ave. (H): Busy street.
 Pennsylvania Ave. (G): Moderately busy.
 Vermont Ave. (G): Moderately busy.
- (2) Athletic field comes to edge of channel from Citrus to Barranca.
- (3) Fwyd between Citrus and Barranca - Poor condition.
- (4) Parking lot covers access area from Barranca to Grand; no access road.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Vermont Ave to Vista Bonita TG H7 B5	Vert. Sides C Bottom C	N	None	ROW Channel	C		637
		S	None	Channel ROW	C		

Survey Notes

- (1) Channel is covered between Vermont & Vista Bonita by a parking lot.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Vista Bonita Ave. to Live Oak Ave. TG 87 B5	Vert. Sides C Bottom C	NW	15' Dirt	ROW Channel	Yes Yes	SF, OS (Park)	3 638-640
		SE	②	Channel ROW	Yes Yes	SF	

Survey Notes

① Crossings:

Mabash Ave. (G): Light traffic.
Cullen Ave. (G): Light traffic.
Bennett Ave. (G): Light traffic.
Live Oak Ave. (G): Moderately busy.

② SE side access area: paved between Vista Bonita and Mabash (used as an alley); park extends to edge of channel from Mabash to Cullen; 15' dirt from Cullen to Live Oak.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Live Oak Ave. to Lorraine Ave. TG 87 B5	Vert. Sides C Bottom C	NW	15' Dirt	ROW Channel	Yes Yes	SF, V	4 641, 642
		SE	15' Dirt ③	Channel ROW	Yes Yes	SF, V	

Survey Notes

① Crossings:

Leadora Ave. (G): Light traffic.
Sierra Madre Ave. (G): Moderately busy.
Lorraine Ave. (G): Moderately busy.

② Streambed is natural E of Lorraine.

③ SF housing comes to edge of channel on SE side from Bennett to Leadora.

SAN DIMAS WASH MAP 22b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Big Dalton Wash to Citrus Ave. TG 88 C3	Vert. Sides C Bottom C	N	15' Dirt	ROW Channel	Yes Yes	V, SF [2], C, MF	4 643-645
		S	15' Dirt	Channel ROW	Yes Yes	SF [2]	

Survey Notes

① Crossings:

Lark Ellen Ave. (G): Moderately busy.
Azusa Ave. (G): Moderately busy.
Canwell Ave. (G): Light traffic.
Hollenbeck Ave. (G): Moderately busy.
Citrus Ave. (G): Moderately busy.

[2] SF housing, both sides; yards are level with ROW, separated only by chain link fence. Potential problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Citrus Ave. to Glendora Ave. TG 88 E3	Vert. Sides C Bottom C	N	15' Dirt	ROW Channel	Yes Yes	SF [2], C, V	1 646, 647
		S	15' Dirt	Channel ROW	Yes Yes	V, NF, C	

Survey Notes

① Crossings:

Barranca Ave. (G): Moderately busy.
Arrow Hwy. (G): Busy street.
Grand Ave. (G): Moderately busy.
Glendora Ave. (G): Moderately busy.

[2] SF housing, N side; yards are level with ROW, separated only by chain link fence. Potential problems.

SAN DIMAS WASH MAP 22c

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Glendora Ave. to Foothill Fwy IG 89 B2	Vert. Sides C Bottom C	N	15'	ROW Channel	yes yes	V, SF, V	3
		S	15' Dirt	Channel ROW	yes yes		

Survey Notes

(1) Crossings:

- Jaunita Ave. (G): Light traffic.
- Bunnie Cove Ave. (G): Moderately busy.
- Gladstone St. (G): Moderately busy.
- Sunflower Ave. (G): Moderately busy.
- Lone Hill Ave. (G): Moderately busy.
- Foothill Fwy. (G): Major obstruction.

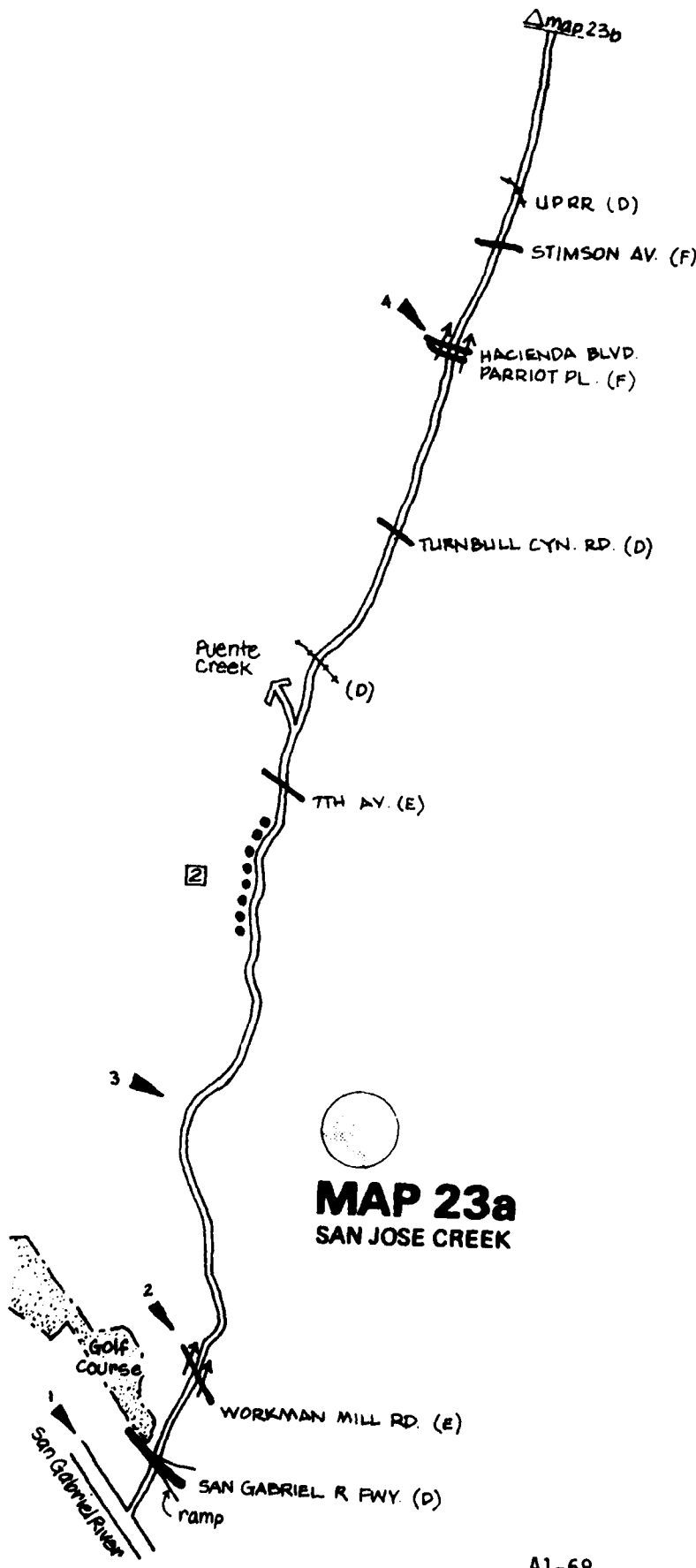
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Foothill Fwy. to Foothill Blvd. IG 89 E1	Vert. Sides C Bottom C	N	15' Dirt	ROW Channel	Yes Yes	SF, St	650-652
		S	15' Dirt	Channel ROW	Yes Yes		

Survey Notes

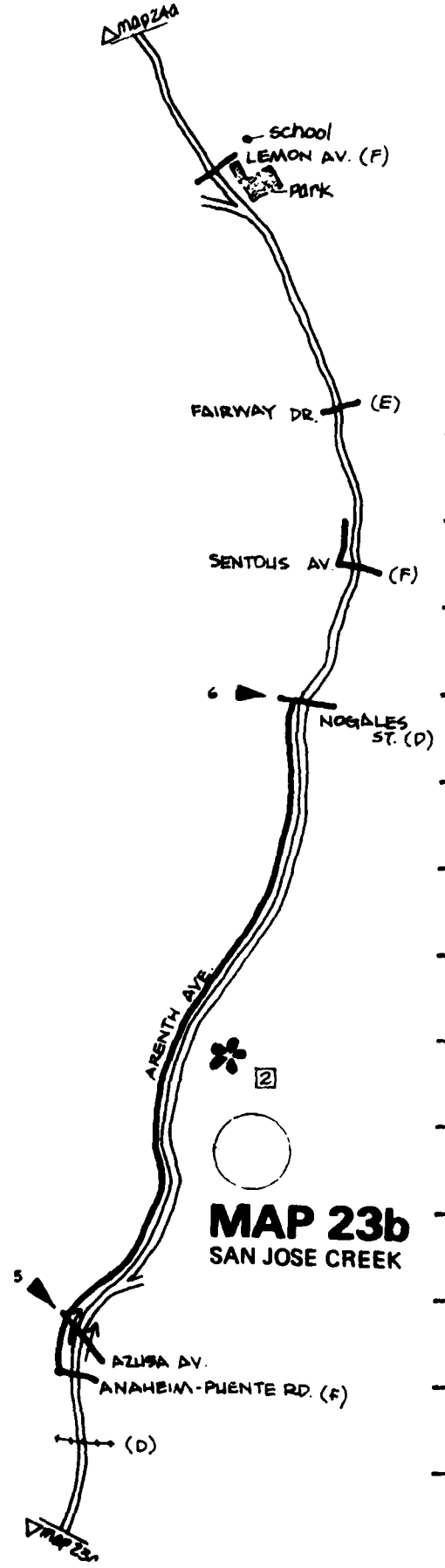
(1) Crossings:

- Amelia Ave. (G): Moderately busy.
- Cataract Ave. (G): Moderately busy.
- San Dimas Ave. (G): Busy street.
- Foothill Blvd. (G): Busy street.

(2) Natural streambed E of Foothill Blvd



MAP 23a
SAN JOSE CREEK



MAP 23b
SAN JOSE CREEK

NOTE: Single Family housing constitutes much of the land use adjacent to the San Jose Creek. Adjacent yards are usually level with the channel ROW, and separated by chain link fencing and vegetation. Comments on Single Family housing are included in the notes on this channel only in cases where a potential problem is thought to exist.

SAN JOSE CREEK MAP 23a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. San Gabriel River to Workman Mill Rd. TG 47 F5	Trap. Sides RR Bottom U	N	15' unpaved	ROW Yes Channel No	OS, SF	2	656
		S	20' unpaved	Channel No ROW Yes			

Survey Notes

- ① Crossings:
San Gabriel River Fwy. (G)
Workman Mill Rd. (AG): Does not obstruct either side.
- ② North levee is used extensively by equestrians.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Workman Mill Rd. to 3rd Ave. TG 48 A5	Trap. Sides RR Bottom U	N	15' unpaved	ROW Yes Channel No	SF, OS		
		S	15' unpaved	Channel No ROW Yes			

Survey Notes

- ① Crossings:
None (3rd Ave. does not cross channel)
- ② North levee is used extensively by equestrians.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. 3rd Ave. to Hacienda Blvd. TG 48 B5-E6	Vert. Sides C Bottom C	N	15' paved Poor Condition	ROW Yes Channel Yes	SF, I, OS	2	657
		S	15' paved Poor Condition	Channel Yes ROW Yes			

Survey Notes

- ① Crossings and inlets:
7th Ave. (G): Very busy. Drain inlets enter from both sides under crossing.
Puente Creek inlet: Obstructs N side.
Union Pacific RR (G)
Turnbull Cyn. Rd. (G): Moderately busy. Drain inlets enter from both sides under crossing.
Hacienda Blvd. (AG): Does not obstruct either side.
- ② Private stables on N side. N access area is used frequently by equestrians to gain access to San Gabriel River (W of 7th Ave.).

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Hacienda Blvd. to Azusa Ave. TG 85 E1, 98 A1-B1	Vert. Sides C Bottom C	N	15' paved	ROW Yes Channel Yes	I	2	
		S	15' paved	Channel Yes ROW Yes			

Survey Notes

- ① Crossings:
Stinson Ave. (G): Light traffic.
Union Pacific RR (G)
SPT CO. RR (G)
Anaheim-Puente Rd. (G): Light traffic.
Azusa Ave. (AG): Does not obstruct either side.

SAN JOSE CREEK MAP 23b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Azusa Ave. to Nogales St. TG 98 C2-F2	Vert. Sides C Bottom C	N	15' paved	ROW Yes Channel Yes	OS	2	
		S	15' paved	Channel Yes ROW Yes			

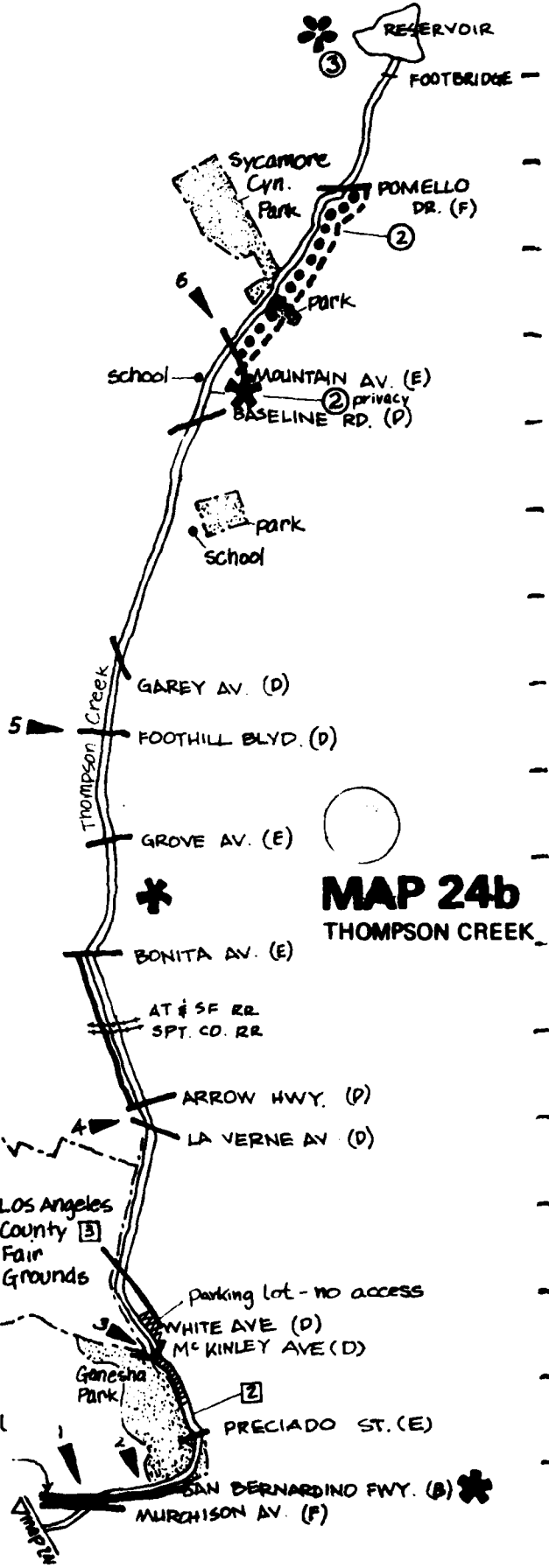
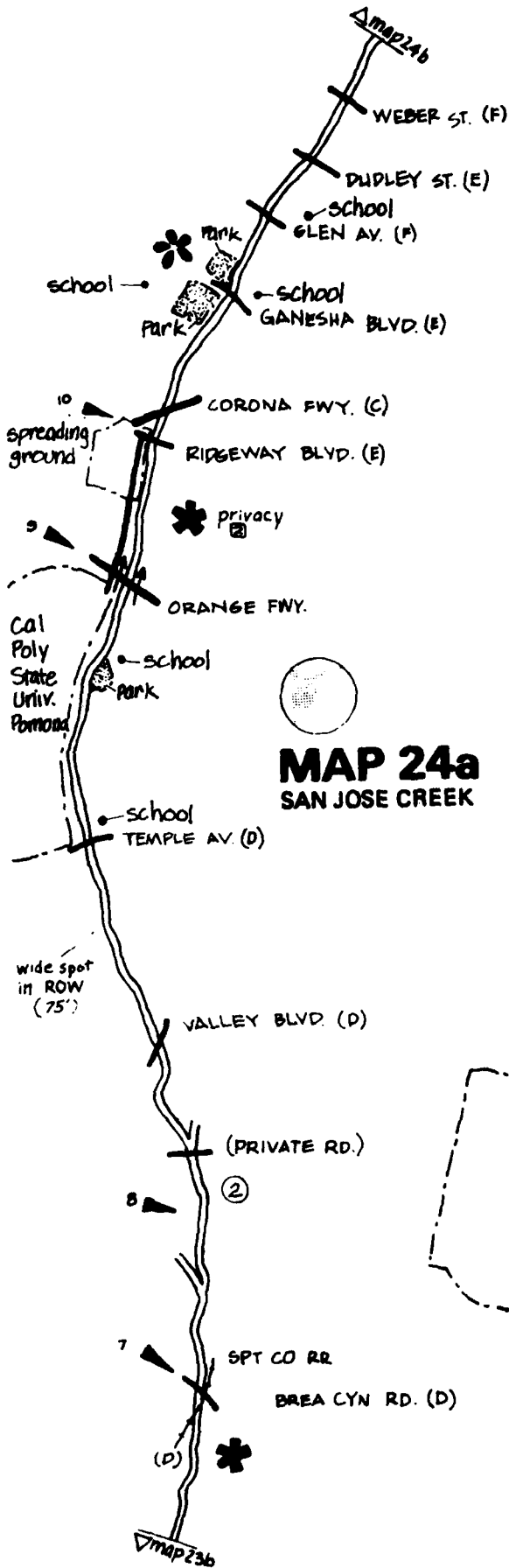
Survey Notes

- ① Crossings and inlets:
Inlet obstructs S side access E of Azusa.
Nogales St. (G): Very busy.
- ② Attractive natural hilly area S of channel near center of reach. Possible rest/recreation area.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Nogales St. to Brea Cyn. Rd. TG 98 F2, 9J D6	Vert. Sides C Bottom C	N	15' paved	ROW Yes Channel Yes	OS, I	2	658
		S	15' paved	Channel Yes ROW Yes			

Survey Notes

- ① Crossings and inlets:
Gentous Ave. (G): Moderately busy
Fairway Dr. (G): Moderately busy.
Inlet obstructs N side access W of Lemon Ave.
Lemon Ave. (G): Very busy.
SPT CO. RR (G): and Brea Cyn. Rd. (G): Both cross in approximately the same location, creating a major obstruction to ROW access.



SAN JOSE CREEK MAP 24a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Brea Cyn. Rd. to Grand Ave. (1) TG 91 D6	Vert. Sides C Bottom C	N	15' paved	ROW Yes Channel Yes	OS	2	659
		S	15' paved	Channel Yes ROW Yes	OS		

Survey Notes

- ① Inlet
Inlet obstructs N side access E of Brea Cyn. Rd.
No crossings (Grand Ave. does not cross channel).

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
8. Grand Ave. to Orange Fwy. TG 93 E5, 94 A2	Vert. Sides C Bottom C	N	15' dirt	ROW Yes Channel Yes	OS, I	3/2	660-665
		S	25' dirt	Channel Yes ROW Yes	OS, SF, S		

Survey Notes

- ① Crossings and Inlets:
Private Road (G): Light traffic.
Inlet obstructs S side access just E of private rd.
Valley Blvd. (G): Very busy.
Temple Ave. (G): Very busy.
② Strong odors from feed lot to S.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
9. Orange Fwy. to Corona Fwy. TG 94 A2	Vert. Sides C Bottom C	N	15' unpaved	ROW Yes Channel Yes	OS (park)	2	666-667
		S	25' unpaved	Channel Yes ROW Yes	SF ②		

Survey Notes

- ① Crossings:
Ridgeway St. (G): Light traffic.
Corona Fwy. (A2): Portions of old bridge remain under fwy. bridge. Removal of these would allow unrestricted access under fwy. bridge.
② SF housing, S side. Yards level with ROW, separated by fences. Potential privacy problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
10. Corona Fwy. to San Bernardino Fwy. TG 94 B2-D1	Vert. Sides C Bottom C	N	15' unpaved road ②	ROW Yes Channel Yes	SF, OS	3	
		S	25' unpaved	Channel Yes ROW Yes	SF, OS		

Survey Notes

- ① Crossings:
Ganesha Blvd. (G): Light traffic.
Glen Ave. (G): Light traffic.
Dudley St. (G): Light traffic.
Weber St. (G): Light traffic.
Murchison Ave. (G): Light traffic.
San Bernardino Fwy. (G): Major Obstruction.
② Total access width 50' (dirt) from Corona to Ganesha on N side.

THOMPSON CREEK MAP 24b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. San Bernardino Freeway to Ganesha Park TG 90 D6	Vert. Sides C Bottom C	N	(2)	ROW Channel - yes	SF	3	
		S	(2)	Channel ROW yes no	F		

Survey Notes

- (1) Crossings: None.
- (2) A paved alley is adjacent to the channel on the north side.
- (3) A 15' planted dirt strip separates the channel from the freeway on the south side.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Ganesha Park (to McKinley Ave.) TG 90 DC	Vert. Sides C Bottom C	N	(2)	ROW Channel - yes	SF	3	
		S	(3)	Channel ROW yes no	F		

Survey Notes

- (1) Crossings: Preciado St. (G): Light traffic. McKinley Ave. (G): busy street.
- (2) Park comes to edge of channel on both sides. The last 700' of channel to the north within the park is covered.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. McKinley Ave. to LaVerne Ave. TG 90 E5	Vert. Sides E Bottom E	W	(2)	ROW Channel (4) yes	Fairgrounds, St	3	
		E	(3)	Channel ROW (4) yes	St, SF		

Survey Notes

- (1) Crossings: White Ave. (G): Busy street. LaVerne Ave. (G): Busy street.
- (2) 10' dirt. McKinley to White; 15' paved, White to LaVerne.
- (3) Passes through fairground parking lot N of McKinley. Parking lot comes to edge of channel on E side. 15' dirt from White to LaVerne. Periodically covered or inaccessible at points in Fairgrounds between White and LaVerne.
- (4) Fenced from White to LaVerne.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. LaVerne Ave. to Foothill Blvd. TG 90 E4-E3	Vert. Sides C Bottom C	W	15' dirt	ROW Channel yes yes	SF, St	3	
		E	15' dirt	Channel ROW yes yes	Mf, OS		

Survey Notes

- (1) Crossings: Arrow Hwy (G): Busy street. AT&T/PT RR(G) Ionita Ave. (G): Moderately busy. Grove Ave. (G): Moderately busy. Foothill Blvd. (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Foothill Blvd. to Mountain Ave. TG 90 E2 to 96 A6	Vert. Sides C Bottom C	NW		ROW Channel yes yes	St, OS	3	
		SE		Channel ROW yes yes	St [2]		

Survey Notes

- (1) Crossings: Garey Ave. (G): Light traffic. Baseline Rd. (G): Moderately busy. Mountain Ave. (G): Light traffic.
- (2) SF housing, SE side between Baseline and Mountain; potential privacy problems.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Mountain Ave. to Thompson Crk TG 96 R6-C5	Vert. Sides E Bottom C	NW	15' dirt	ROW Channel yes yes	OS	5	
		SE	15' dirt (2)	Channel ROW yes yes	St, OS		

Survey Notes

- (1) Crossings: Pennello Dr. (G): Light traffic. Several small private drives (not shown on map) (G): Light traffic.
- (2) Exercise course is located along SE side, along with bicycle and equestrian trails.
- (3) Attractive hillside, scenic open space.

MARSHALL CREEK MAP 25a

Reach	Channel	Side	ROM Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Puddingstone Reservoir to Holly Oak St. TG 90 B4	Vert. Sides C Bottom C	M	15' Dirt	ROM Channel	Yes Yes	CS	3 668-672
		E	15' Dirt	Channel ROM	Yes Yes	CS	

Survey Notes

- ① Crossings and inlets:
 Puddingstone Creek inlet obstructs W side S of Puddingstone Dr.
 Live Oak Wash Inlet obstructs E side S of Puddingstone Dr.
 Puddingstone Dr. (G): Moderately busy.
 SPT RR (G)
 Arrow Hwy. (G): Busy street.
 AT&SF RR (G): Equestrian ramp provides for undercrossing in invert.
 Palomares Ave. (G): Light traffic.
 Third Ave. (G): Moderately busy.
 Bonita Ave. (G): Moderately busy.
 Fifth St. (G): Moderately busy.
 Holly Oak St. (G): Light traffic.
- ② Equestrian trail follows E side of Wheeler Ave., reenters channel ROM at Palomares, ramps down into invert N of AT&SF RR.

Reach	Channel	Side	ROM Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Holly Oak St. to Debris Basin TG 90 C2	Vert. Sides C Bottom C	M	15' Dirt	ROM Channel	Yes Yes	SF, OS	4 672-674
		E	15' Dirt	Channel ROM	Yes Yes	SF, OS	

Survey Notes

- ① Crossings:
 Paseo Ave. (G): Light traffic.
 Foothill Blvd. (G): Busy street.
 Baseline Rd. (G): Busy street.

LIVE OAK WASH MAP 25b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Puddingstone Reservoir to Walnut St. IG 90 B4	Vert Sides L Bottom C	W	15' Paved	ROW Channel	Yes Yes	3	676-678
		E	15' Paved (2)	Channel ROW	Yes Yes		
					OS		

Survey Notes

- (1) Crossings:
 Puddingstone Dr. (G): Moderately busy
 Park Ave. (G): Light traffic
 SPT RR (G)
 Walnut St. (G): Light traffic
- (2) 15' unpaved access road between SPT RR and Walnut St.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Walnut St. to D St. IG 90 C3	Vert Sides C Bottom C	W	(2)	ROW Channel	No Yes	3	678-680
		E	10' Dirt	Channel ROW	Yes No		
					SF		

Survey Notes

- (1) Crossings:
 Arrow Hwy. (G): Busy street
 AT & SF RR (G)
 1st St. (G): Moderately busy.
 3rd Ave. (G): Light traffic.
 Branta Ave. (G): Moderately busy.
 D St. (G): Moderately busy.
- (2) W side access area: B extends to edge of channel between Walnut and Emerald confluence, providing access; no access from Emerald confluence to D.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. D St. to Foothill Blvd. IG 90 D3	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	3	681, 682
		E	None	Channel ROW	Yes S, OS		
					SF		

Survey Notes

- (1) Crossing:
 Foothill Blvd (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Foothill Blvd. to Debris Basin IG 90 E2	Vert. Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes	4	683-688
		E	15' Dirt	Channel ROW	Yes Yes		
					SF, OS		

Survey Notes

- (1) Crossings:
 Bradford St. (G): Light traffic.
 Amherst St. (G): Light traffic.
 Rowan St. (G): Light traffic.
 Williams Ave. (G): Light traffic.

EMERALD WASH MAP 25b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Live Oak Confluence to Foothill Blvd IG 90 F3	Vert Sides C Bottom C	W	(2)	ROW Channel	Yes Yes	3	689
		E	15' Dirt	Channel ROW	Yes Yes		
					SF		

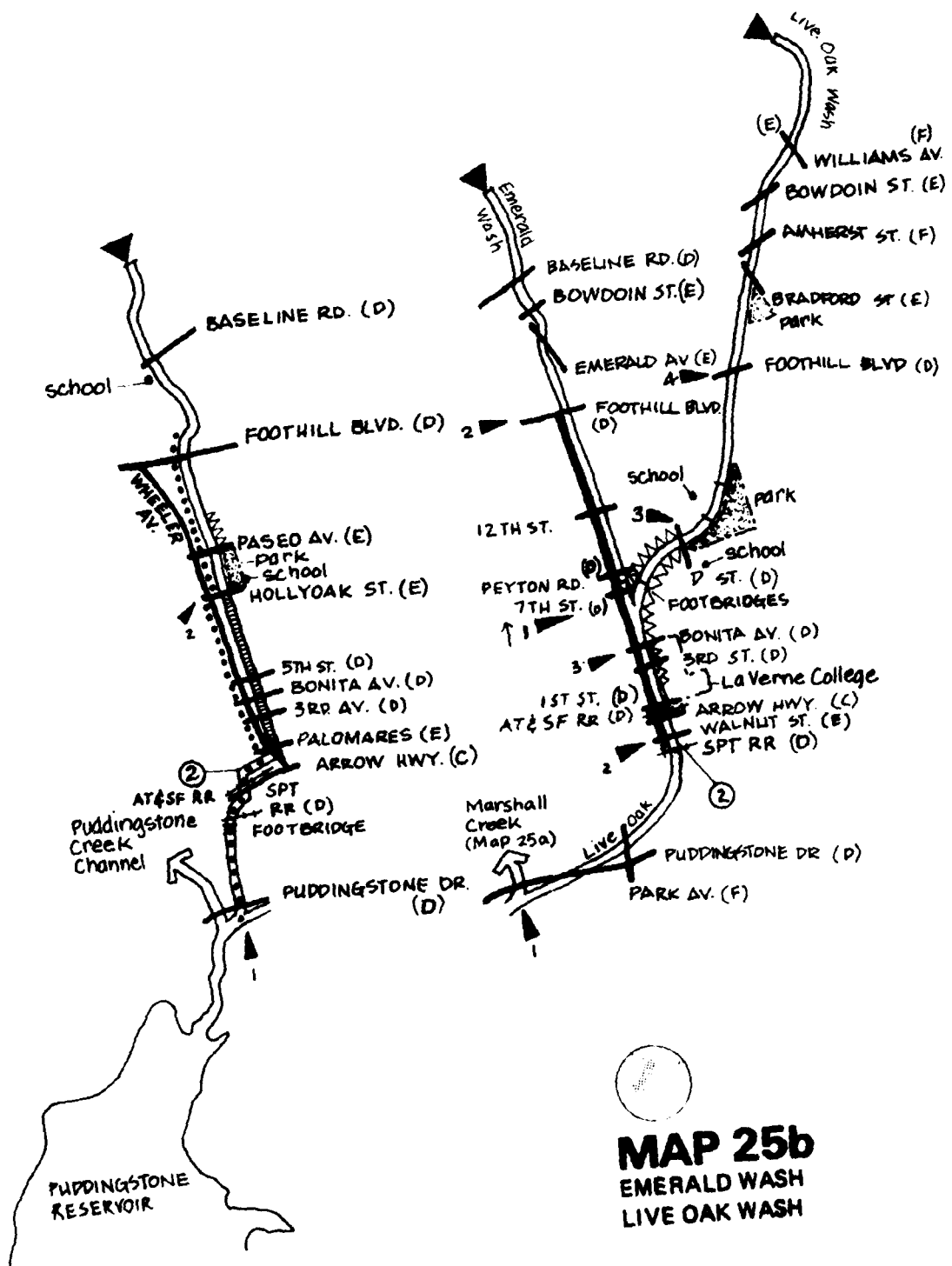
Survey Notes

- (1) Crossings:
 7th St. (G): Light traffic.
 Peyton Rd. (G): Light traffic.
 17th St. (G): Light traffic.
 Foothill Blvd. (G): Busy street.
- (2) W side access area: B St. extends to edge of channel, providing access.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Foothill Blvd. to Beginning of Channel IG 90 D2	Vert Sides C Bottom C	W	15' Dirt	ROW Channel	Yes Yes		690, 691
		E	15' Dirt	Channel ROW	Yes Yes		
					SF, OS		

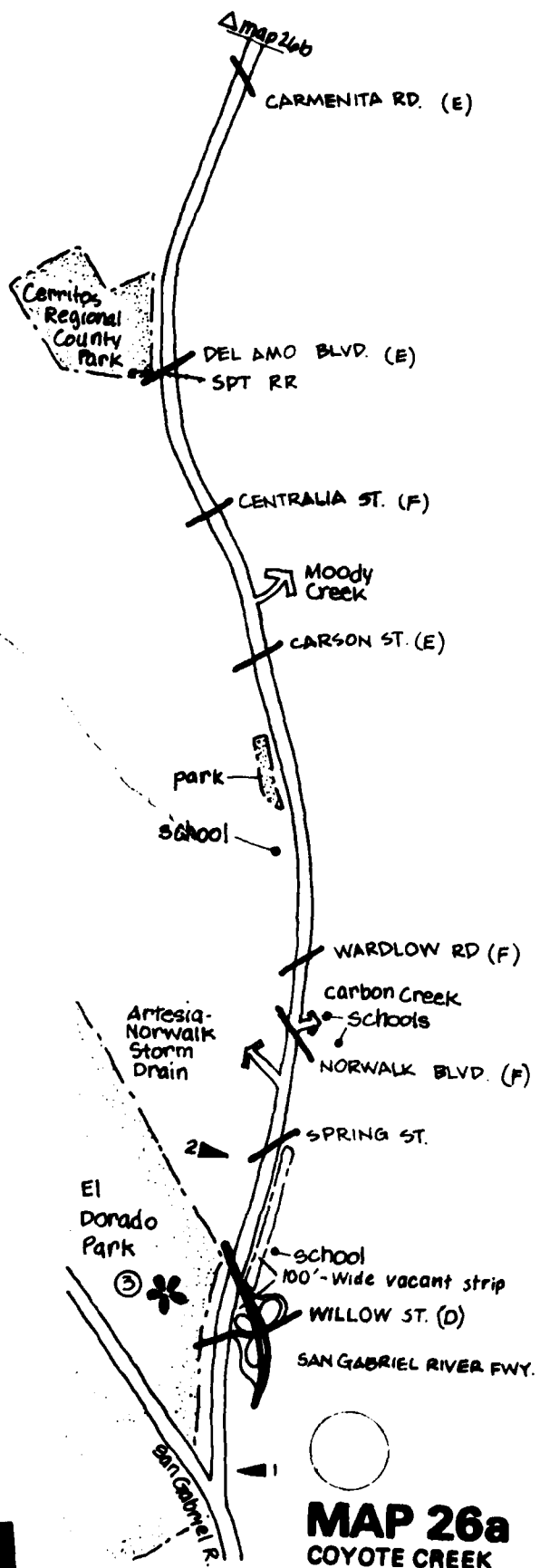
Survey Notes

- (1) Crossings:
 Emerald Ave. (G): Light traffic.
 Bowdoin St. (G): Light traffic.
 Baseline Rd. (G): Busy street.

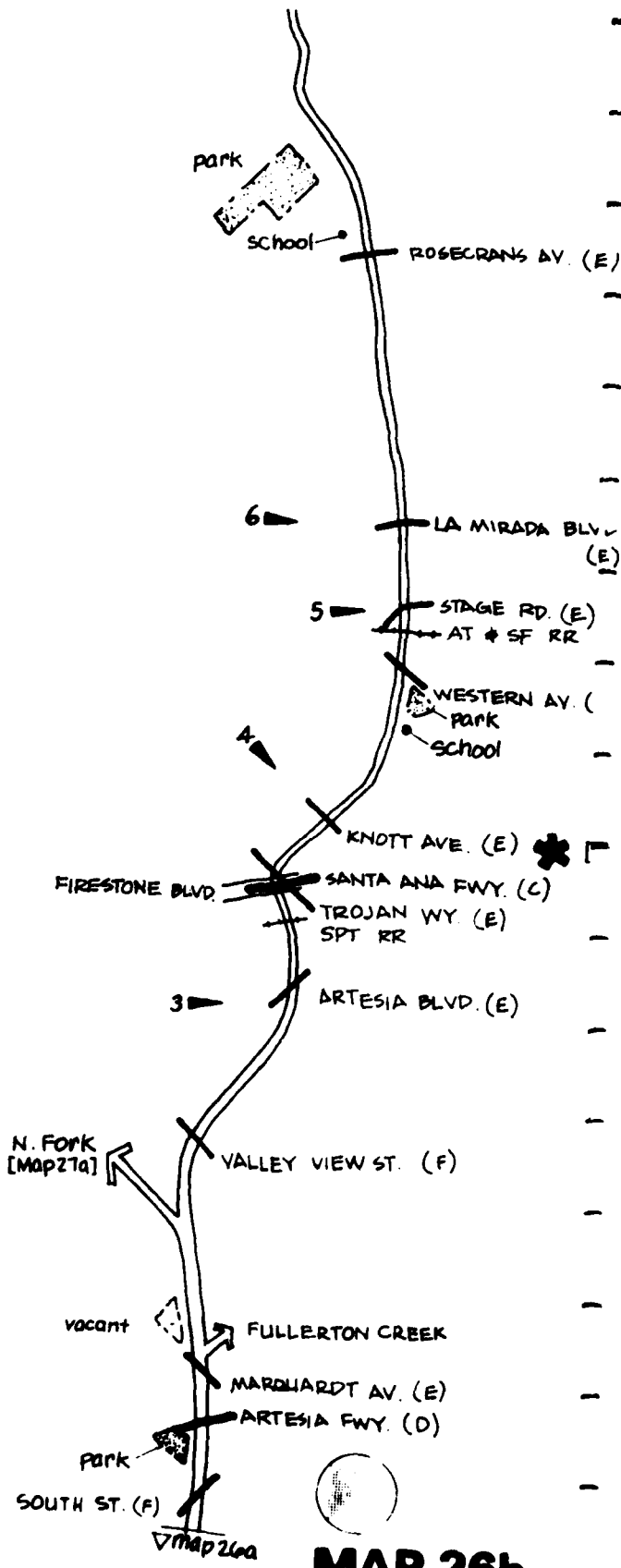


MAP 25a
MARSHALL CREEK

MAP 25b
EMERALD WASH
LIVE OAK WASH



MAP 26a
COYOTE CREEK



MAP 26b
COYOTE CREEK

COYOTE CREEK MAP 26a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. San Gabriel River to Spring St TG 76 F2	Trap, Sides C Bottom C, LF	W	10' Paved	ROW Channel Yes Channel No	0 [2], HF, V	3	692-696
		E	10' Paved + 100' Dirt	Channel No ROW Yes	V, S		

Survey Notes

- (1) Crossings:
Willow St. (G): Busy street.
San Gabriel River Hwy. (E side 6' AG, W side G)
Spring St. (G): Moderately busy.
- (2) Other adj. use: El Dorado Park and Nature Center.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Spring St to Artesia Blvd. TG B1 B6 to B2 B5	Trap Sides C Bottom C, LF	W	10' Paved	ROW Channel Yes Channel No	SF, HF, I, C	2	697-718
		E	10' Paved	Channel Yes ROW No	SF [3], I, C, 0 [2]		

Survey Notes

- (1) Crossings and inlets:
Artesia-Norwalk Storm Drain blocks access on W side.
Norwalk Blvd. (G): Moderately busy.
Carbon Creek inlet blocks access on E side.
Wardlow Rd. (G): Moderately busy.
Carson St. (H): Moderately busy.
Moody Creek inlet blocks access on E side.
Centralia St. (A): Moderately busy.
RR track (G).
Del Amo Blvd. (G): Busy street.
Carnivita Rd. (G): Moderately busy.
South St. (G): Moderately busy.
Artesia Hwy. (W side, 3' AG, E side).
Margardt Ave. (G): Moderately busy.
Fullerton Creek inlet blocks access on E side.
North York inlet blocks access on W side.
Valley View St. (G): Moderately busy.
Artesia Blvd. (G): Busy street.
- (2) Other adj. use: Forest Lawn N of Carson St.
- (3) SF homes between Del Amo and Carnivita are at same level as channel access on E side; separated by 4' block wall.

COYOTE CREEK MAP 26b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Artesia Blvd. to Knott Ave. TG B3 A5	Vert Sides C Bottom C	W	60' Dirt	ROW Channel No Channel Yes	0 [2], V, I	3	719
		E	60' Dirt	Channel Yes ROW No	0 [2], V, I		

Survey Notes

- (1) Crossings:
SPT HP (G).
Santa Ana Hwy. (G).
Knott Ave. (G): light traffic.
- (2) Other adj. use: RR ROW.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Knott Ave. to Stage Rd TG B3 A5 to E2	Trap, Sides H Bottom H	W	10' Dirt	ROW Channel Yes Channel No	S, SF [2]	4	720-727
		E	10' Dirt	Channel No ROW Yes	HF, SF [2]		

Survey Notes

- (1) Crossings:
Western Ave. (G): light traffic.
Stage Rd. (H): light traffic.
AT&SF (G).
- (2) SF houses adjacent to channel at same level; separated by chain link fencing and shrubbery.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Stage Rd to La Mirada Blvd. TG B3 E2 to E4	Vert. (2) Sides F Bottom C	W	10' Dirt 3	ROW Channel Yes Channel Yes	SF [4]	3	723
		E	10' Dirt 3	Channel Yes ROW Yes	HF, SF [4]		

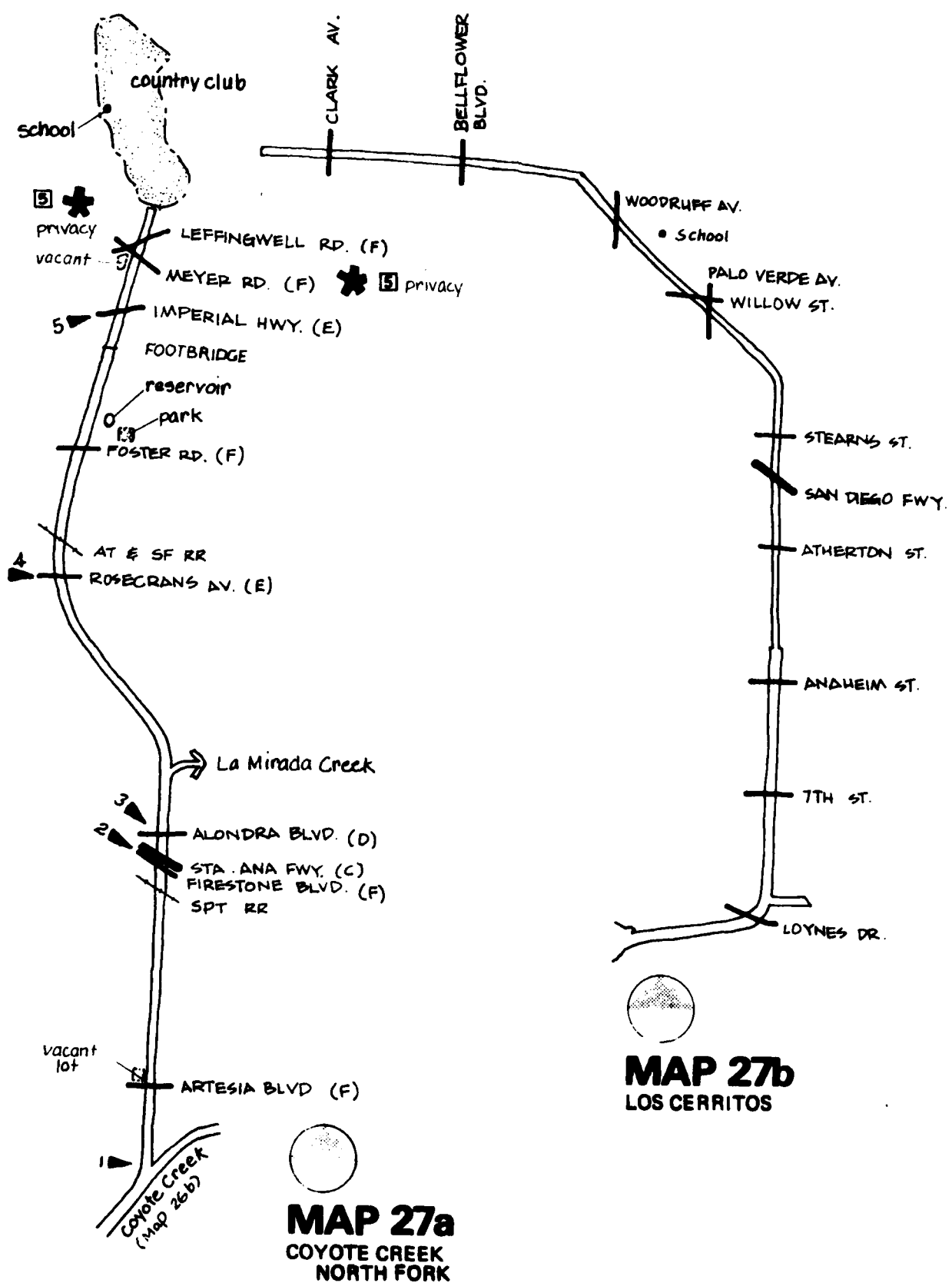
Survey Notes

- (1) Crossings:
La Mirada Blvd. (G): Moderately busy.
- (2) Channel is trap, for one block between Western Ave. and Stage Rd.
- (3) Access paved between Stage Rd. and La Mirada Blvd.
- (4) SF houses adjacent to channel on 3'-5' embankment, separated by block walls and shrubbery.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. La Mirada Blvd. to N of Rosecrans Ave TG B3 E4 to E7	Trap (2) Sides F Bottom F	W	10' Paved	ROW Channel Yes Channel No	0 [3], SF [5], HF, S	3	724-727
		E	10' Paved	Channel No ROW Yes	0 [4], SF [5], C		

Survey Notes

- (1) Crossings:
Rosecrans Ave. (E): Moderately busy.
- (2) Channel becomes vertical under bridges.
- (3) Other adj. uses: park, golf course.
- (4) Other adj. uses: golf course.
- (5) SF houses are set well back from channel, no privacy problems.



MAP 27a
COYOTE CREEK
NORTH FORK

MAP 27b
LOS CERRITOS

COYOTE CREEK NORTH FORK MAP 27a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Coyote Creek to Firestone Blvd. TG B2 E5	Trap. Sides C Bottom C, LF	W	10' Paved + 5' Dirt	ROW Channel Yes No	I, V	3	728-731
		E	10' Paved + 5' Dirt	Channel ROW Yes	I		

Survey Notes

- (1) Crossings:
 Artesia Blvd. (G): Busy street.
 SPT RR (G)
 Firestone Blvd. (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Firestone Blvd. to Alondra Blvd. TG B2 E4	Vert. Sides C Bottom C, LF	W	10' Paved + 5' Dirt	ROW Channel Yes Yes	I, V	2	732-735
		E	10' Paved + 5' Dirt	Channel ROW Yes Yes	I		

Survey Notes

- (1) Crossings:
 Santa Ana Fwy. (G)
 Alondra Blvd. (3' AG): Moderately busy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Alondra Blvd. to Rosecrans Ave. TG B2 E3	Trap. Sides C Bottom C, LF	W	10' Paved + 5' Dirt	ROW Channel Yes No	I	3	736-737
		E	10' Paved + 5' Dirt	Channel ROW No Yes	I		

Survey Notes

- (1) Crossings and inlets:
 La Mirada Creek inlet obstructs access on E side of channel.
 Rosecrans Ave. (G): Busy street.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Rosecrans Ave. to Imperial Hwy. TG B2 E2	Trap. Sides C Bottom C, LF	W	10' Paved + 5' Dirt	ROW Channel Yes No	I	2	738-741
		E	10' Paved + 5' Dirt	Channel ROW No Yes	I		

Survey Notes

- (1) Crossings:
 AT&SF RR (G)
 Foster Rd. (G): Light traffic.
 Wilshire Oil Rd. (G): Not an obstruction.
 Imperial Hwy. (G): Busy street.

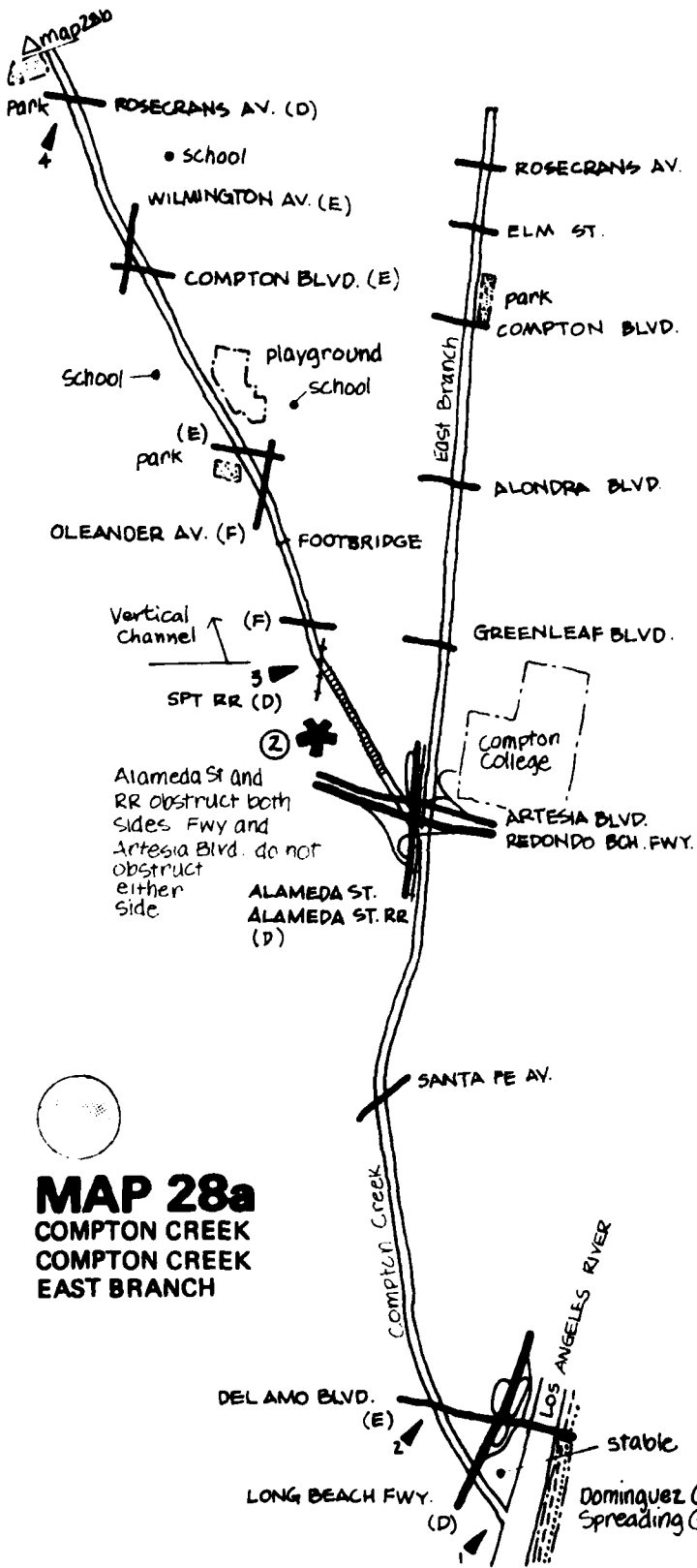
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. Imperial Hwy. to Leffingwell Rd. TG 61 E6	Trap. (2) Sides C Bottom C, LF	W	10' Paved + 5' Dirt	ROW Channel Yes No	I, [3], [5]	3	741-743
		E	10' Paved + 5' Dirt	Channel ROW No Yes	[3]		

Survey Notes

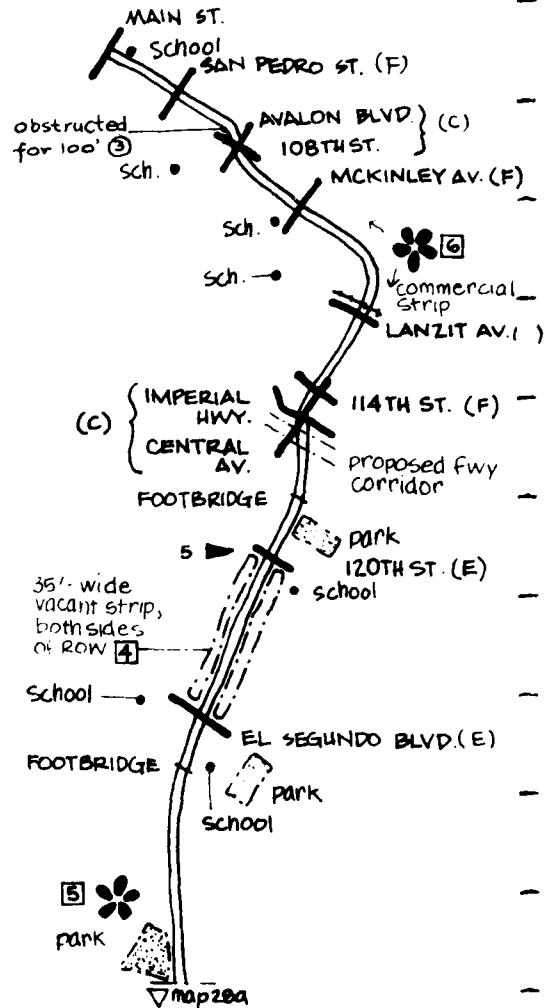
- (1) Crossings:
 Meyer Rd. (G): Light traffic.
 Leffingwell Rd. (G): Light traffic.
- (2) Concreted culvert stops N of Leffingwell where channel leaves golf course
- (3) SF housing in this reach is on a 5' high embankment above the channel level or on the same level on both sides of the channel. The homes are separated by chain link fences and usually are not well screened from the channel. Potential problem.

LOS CERRITOS CHANNEL MAP 27b

Not Surveyed



MAP 28a
COMPTON CREEK
COMPTON CREEK
EAST BRANCH



MAP 28b
COMPTON CREEK

COMPTON CREEK MAP 28a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Los Angeles River to Del Amo Blvd. TG 70 B3	Trap Sides RR Bottom U	E	12' paved	ROW Yes Channel No	Stable, I	2 Fwy. Noise	744, 745
		W	12' paved	Channel No ROW Yes	V, F, I		

Survey Notes

- Crossings and inlets:
Long Beach Fwy. (G)
Del Amo Blvd. (G): Busy street.
- Channel has concrete sides and bottom and low-flow channel for first 300'.
- W ROW not fenced from confluence to fwy.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Del Amo Blvd. to SPT RR TG 70 B3 to 64 F5	Trap Sides RR Bottom U	E	11' ②③	ROW Yes Channel No	RR, I	2	746-762
		W	11' ②③	Channel No ROW Yes	RR, I		

Survey Notes

- Crossings and inlets:
Santa Fe Av. (G): Moderately busy.
East Branch Inlet: Obstructs E side just S of Alameda St.
Alameda St. RR (G) and Alameda St. (G): These two bridges cross only a few feet apart, and constitute a single obstruction.
Drain inlet just N of auto bridge on the E side would make a ramp more difficult to construct. Moderately busy street.
Vertical clearance from bottom of bridges to water at time of survey was approximately 10'.
Redondo Bch. Fwy. and fwy. ramps (AG): Do not obstruct either side.
Artesia Blvd. (AG): Does not obstruct either side.
SPT RR (G)
- Channel is being covered from 500' N of Redondo Beach Fwy. to 150' S of SPT RR bridge. The entire area will be developed, probably as an industrial site.
- Access roads paved first third of distance from Del Amo to Santa Fe Avenue. Dirt for remainder of reach.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. SPT RR to Rosecrans Ave. TG 64 F5	Vert Sides C Bottom C	E	12'-15' dirt ③	ROW Yes Channel Yes	V, SF [5], OS, B, T	2	763-767
		W	12'-15' dirt ④	Channel Yes ROW Yes 4	I, SF [5], MF, OS, V, C, ST		

Survey Notes

- Crossings:
Greenleaf Blvd. (S): Light traffic.
Oleander Av. (G): Light traffic.
Alondra Blvd. (G): Moderately busy.
Compton Blvd. (G): Moderately busy.
Wilmington Av. (G): Moderately busy.
Rosecrans Av. (G): Busy street. Pipes cross channel just N of Rosecrans; might make tunnel difficult.
- Vertical channel begins 150' S of SPT RR.
- E side paved for half of the distance from Alondra to Compton.
- No access road on W side last 350' S of Compton. 25'-wide planted strip with grass and trees, no ROW fence. Road parallels channel on other side of planted strip from channel. W access road has steep side slope from Wilmington to Rosecrans. Retaining wall needed for trail use.
- Much of the adjacent use on both sides of the channel from Greenleaf to 120th St. is SF housing. Yards are generally level with ROW, separated by chain link fences and sometimes vegetation. Improved separation needed for trail use.

COMPTON CREEK MAP 28b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Rosecrans Ave. to 120th St. TG 64 D2 to 58 D5	Vert Sides C Bottom C	E	15' dirt	ROW Yes Channel Yes	C, SF [3], V [4], S, T	2	768-771
		W	11'-15' dirt ②	Channel Yes ROW Yes	C, OS [5], SF [3], St, I, V [4]		

Survey Notes

- Crossings:
El Segundo Blvd. (G): Moderately busy.
Pipe crossings partially obstruct both sides in two places N of El Segundo. 3' high, narrow access to 8'.
120th St. (G): Moderately busy.
- W access area between Rosecrans and El Segundo used extensively by children for bicycling, other activities. Presently serves as a lead-in strip to Gonzalez Park. W side access width narrows to 8' just S of 120th St. due to an inlet.
- Same as note 5, Reach 3. Some concrete block wall separates homes S of El Segundo on the W side.
- Vacant strip 35' wide parallels channel ROW on both sides from 300' W of El Segundo to 120th St. Being gardened in many places.
- Ramon Gonzalez Park is adjacent to the W side of the channel N of Rosecrans. Heavily used, includes a community center.

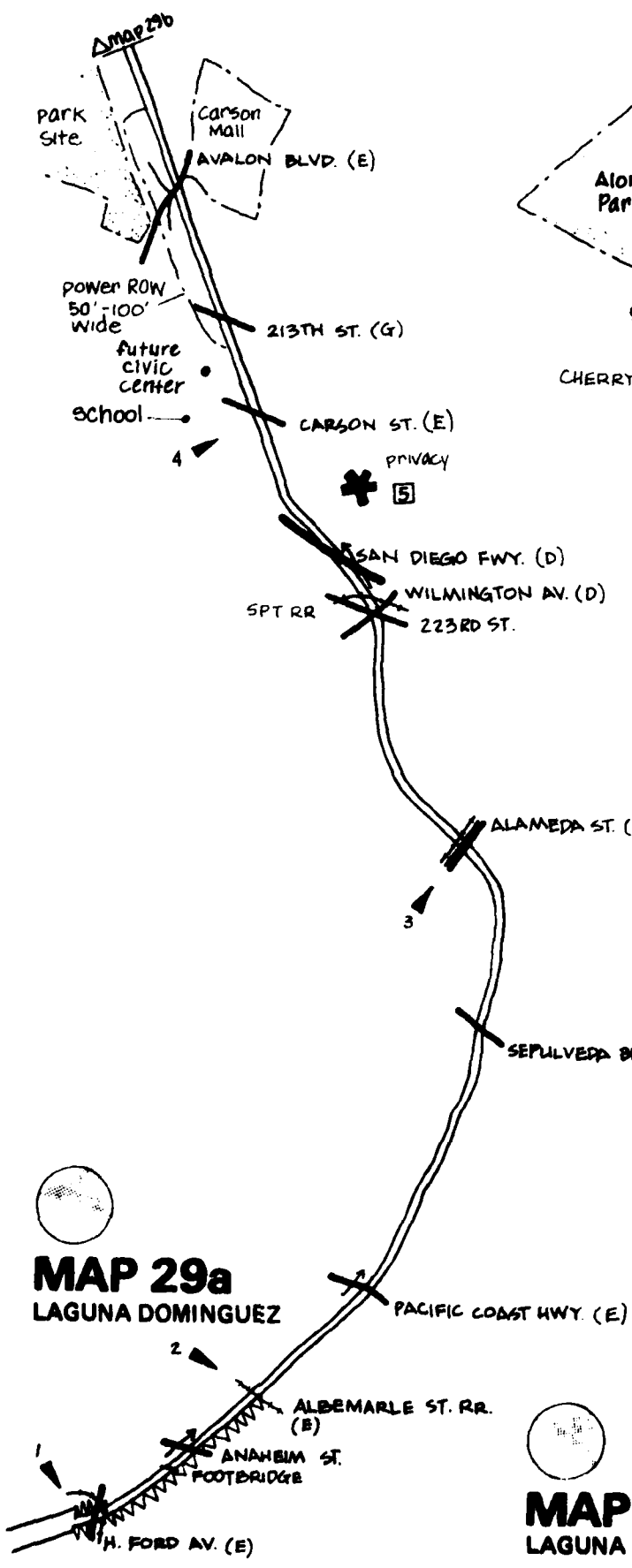
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5. 120th St. to Main St. TG 58 D5 to B4	Vert Sides C Bottom C	E/N	10'-18' paved ②	ROW Yes Channel Yes	SF [4], V [5], C [6], I, MF	2	772-776
		W/S	12'-18' paved ③	Channel Yes ROW Yes	SF [4], V [5], C, I, MF		

Survey Notes

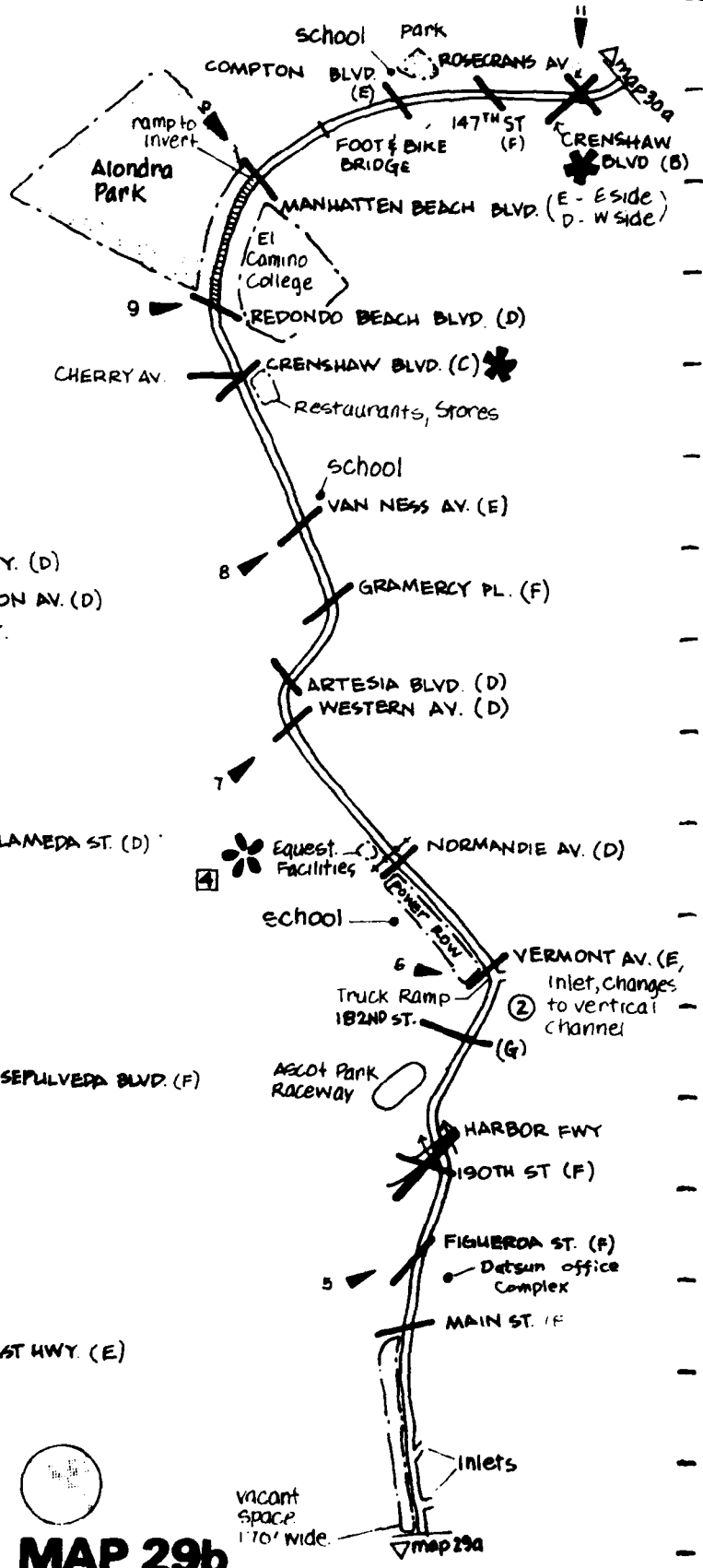
- Crossings and inlets:
Imperial Hwy./Central Ave. intersection (G): Very busy intersection.
High pressure gas line N of intersection might make tunnel difficult.
Channel covered by intersection for 200'.
114th St. (G): Light traffic.
Lanzit Ave. and RR (G): Light traffic.
McKinley Ave. (G): Light traffic.
Avalon Blvd./108th St. intersection (G): Busy intersection.
Pipe obstructs both sides 120' W of Avalon/108th St. 2-1/2' high.
San Pedro St. (G): Light traffic.
Inlet obstructs S side 250' E of Main. 10' wide.
Main St. (G): Light traffic. Channel is underground W of Main.
- Dirt from San Pedro to Main.
- Concrete block wall obstructs S side access for first 100' W of Avalon. 3' passage. Access road is dirt for part of distance from Avalon to San Pedro.
- Much of the adjacent use on both sides of the channel from 120th to Main is SF housing. Yards are 0'-3' higher than the ROW, and usually separated by chain link fences and sometimes vegetation. Improved separation needed for trail use.
- 400' wide vacant strip S of Imperial, both sides of channel. Proposed 105 fwy. corridor.
- Commercial strip from 114th to McKinley, E side. Backs of buildings face channel.

COMPTON CREEK EAST BRANCH MAP 28a

Not Surveyed



MAP 29a
LAGUNA DOMINGUEZ



MAP 29b
LAGUNA DOMINGUEZ

LAGUNA DOMINGUEZ CHANNEL MAP 29a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 East Basin to Alibonnie St. RR TG 74 E4	Trap Sides LS Bottom Clay	E/S	② ③	ROW No Channel Yes	I, St	2	777-780
		W/N	④	Channel Yes ROW No	I		

Survey Notes

- ① Crossings:
 - Henry Ford Ave. (G): Moderately busy street RR bridge crosses with auto bridge on N side
 - Anahelm St. (AG): No obstruction
 - Alibonnie St. RR (G): Pipe and rail bridges cross together. Pipes do not obstruct access
- ② There is no access on either side from E Basin slip to Henry Ford Ave
- ③ E Side: No usable access - obstructed by tracks
- ④ Paved from Henry Ford to Anahelm (bad condition, needs resurfacing). Gravel from Anahelm to Alibonnie St. RR

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2 Alibonnie St. RR to Alameda St TG 74 E2	Trap Sides LS Bottom Clay	E	12' paved	ROW Yes Channel No	I, V	2	781-788
		W	11'-13' ③	Channel No ROW Yes	I		

Survey Notes

- ① Crossings:
 - Pacific Coast Hwy: Obstructs E side only (4' BG on N side)
 - Sepulveda Blvd (G): Pipe bridges and small foot bridge cross on either side of auto bridge. do not obstruct access. Moderately busy street
 - Alameda St. (G): Light traffic. Pipe crosses just E of auto bridge. Two RR bridge cross a short distance W of auto bridge
- ② Gravel from RR bridge to Pacific Coast Hwy. Paved dirt from Pacific Coast Hwy to 1/2 mile S of Alameda. Dirt remainder of distance to Alameda.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3 Alameda St to Carson St TG 69 E5	Trap Sides LS Bottom Clay	E/W	12' paved	ROW Yes Channel No	SF ④	2	789-797
		W/S	12' paved	Channel No ROW Yes	I, ④, C, V		

Survey Notes

- ① Crossings:
 - Wilmington Ave (273rd St) (G): Very busy intersection. Difficult to cross. Drain inlets under bridge both sides might make ramp more difficult to construct
 - SPT RR Br. (G): Slope of wall under W end of bridge is fairly steep, might make a ramp more difficult
 - San Diego Fwy (S): AG W side, 10' E side: Pipes obstruct access under fwy on W side. Narrow dirt footpath passes under bridge on E side. Small footbridge crosses channel with pipes, N side of fwy.
 - Carson St (G): Busy street. Drain inlets at E end of bridge might make ramp more difficult to construct
- ② Dirt footpath last 200' S of fwy. Rough surface from fwy to Carson (gravel aggregate)
- ③ Pavement needs repair from RR bridge to fwy. Rough surface from fwy to Carson (gravel aggregate)
- ④ Passes through Atlantic Richfield refinery between Alameda and Wilmington
- ⑤ SF, NE side between fwy and Carson. 1' higher than ROW. Separated by chain link, wood fences, and concrete block in areas. Equal amounts, and by vegetation

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4 Carson St. to Figueroa St. TG 69	Trap Sides LS Bottom Clay	NE	11'-13' paved	ROW Yes Channel No	PPS, RW, V, I	3	797-802
		SW	12'-14' paved	Channel No ROW Yes	Power ROW, DC, ④, I		

Survey Notes

- ① Crossings and inlets:
 - 213th St. (G): Light traffic.
 - Avalon Blvd. (G): Busy street. Drain inlet under N end of bridge might make ramp more difficult to construct
 - Two inlets obstruct NE side between Main and Avalon
 - Main St. (G): Moderately busy street
 - Figueroa St. (G): Moderately busy street
- ② Rough surface from Carson to Avalon (gravel aggregate). Poor condition on SW side from 213th to Avalon
- ③ SF, N side, Carson to 213th. Separated by high concrete wall
- ④ Planted freeway buffer strip and large open space between buffer and channel

LAGUNA DOMINGUEZ CHANNEL MAP 29b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
5 Figueroa St to Vermont Ave. TG 64 A6	Trap Sides LS Bottom Clay	E	12' paved	ROW Yes Channel No	V, I	2	803-810
		W	12' paved	Channel No ROW Yes	V, I		

Survey Notes

- ① Crossings:
 - 110th St. (G): Moderately busy
 - Harbor Fwy (AG): Does not obstruct either side. Access narrows to 9' under S side of bridge.
 - 182nd St. (G): Light traffic
 - Vermont Ave. (G): Moderately busy street. Channel is vertical under Vermont bridge.
- ② Access areas are dirt on both sides for about 300' under Harbor Fwy. Both sides are obstructed where the channel changes from trapezoidal to vertical (just S of Vermont). A channel inlet enters from the N at this point, and an access ramp to the invert from the S

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
6. Vermont Ave. to Western Ave. TG 63 E5	Vert. Sides C Bottom C, LF	N	12'-15' paved ②	ROW Yes Channel Yes	SF ③, C, V	2	
		S	12'-15' dirt ②	Channel Yes ROW Yes	Power ROW, AC ④		

Survey Notes

- ① Crossings:
Normandie Ave. (G): Moderately busy street. Bridge carries street and RR.
Western Ave. (G): Busy street.
- ② Access width widens to 30' near Western (both sides). 13' paved road N side.
- ③ SF housing, N side, Normandie to Vermont. Yards 2' higher than ROW, separated by chain link and concrete block.
- ④ Small set of stables and horse ring in power ROW, S side, W of Normandie.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
7. Western Ave. to Van Ness Ave. TG 63 D5	Vert. Sides C Bottom C, LF	N	12'-14' paved 6'-13' dirt	ROW Yes Channel Yes	C ②, MF, I, SF ③	2	
		S	20'-25' dirt	Channel Yes ROW Yes	MF, I, SF ③		

Survey Notes

- ① Crossings:
Artesia Blvd. (G): Busy street.
Gramercy Pl. (G): Not busy.
Van Ness Ave. (G): Moderately busy.
- ② Storage lockers.
- ③ SF housing, N and S sides from Gramercy to Van Ness. Back yards are 2'-5' higher than ROW, separated by concrete block, wood slats, and heavy vegetation.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
8. Van Ness Ave. to Redondo Beach Blvd. TG 63 C4	Vert. Sides C Bottom C, LF	N	13' paved 7' dirt	ROW Yes Channel Yes	S, SF ②, C, OS	3	
		S	13' paved 7' dirt	Channel Yes ROW Yes	SF ②, C, MF, V		

Survey Notes

- ① Crossings:
Crenshaw Blvd./Cherry Ave. (G): Heavy traffic on Crenshaw, light traffic on Cherry. Tunnels would be difficult because of the long distances required to cross under both streets.
Redondo Beach Blvd. (G): Busy street.
- ② SF housing, N and S sides, from Van Ness to slightly S of Crenshaw; yards 2'-4' higher than ROW, separated mostly by chain link, shrubs. SF from Cherry to 350' W, S side; yards level with ROW, separated mostly by concrete block, some wood slat fencing.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
9. Redondo Beach Blvd. to Manhattan Beach Blvd. TG 63 C4	Vert. Sides C Bottom C, LF	E	None	ROW - Channel -	El Camino College		811-812
		W	None	Channel - ROW -	Alondra Park		

Survey Notes

- ① Crossings:
El Camino College parking structure (G): (See Below)
Manhattan Beach Blvd. (G): Moderately busy. Large inlet enters from W side, just S of Manhattan. A tunnel under Manhattan on this side would be difficult.
- ② Two-story parking structure covers channel from 100' N of Redondo to just S of Manhattan. Any trails following the channel would pass through the adjacent park for the length of this reach.
- ③ Access ramp to Invert enters from Manhattan Beach on W side
- ④ Bike shop half block on W of Redondo Beach.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
10. Manhattan Beach Blvd. to Rosecrans Ave. TG 63 C3	Vert. Sides C Bottom C	E	12' paved ②	ROW Yes Channel Yes	SF ③, MF, V, C	3	
		W	11'-13' dirt	Channel Yes ROW Yes	SF ③, S, OS, V		

Survey Notes

- ① Crossings:
Compton Blvd. (G): Moderately busy.
147th St. (G): Light traffic.
Crenshaw Blvd./Rosecrans Ave. (G): SE corner of intersection is over wedge of channel. Channel is covered between the two streets (covered for approx. 250' along W levee, 400' along E levee). Heavy traffic on both streets.
- ② Poor condition. Needs resurfacing.
- ③ SF housing, both sides, from Manhattan to Compton (yards 5' higher than ROW, separated by chain link, conc. block) and from 147th to Crenshaw (mostly on E side, 2' higher than ROW, separated by chain link fences).
- ④ Appeal decreases N of 147th. Lot of garbage in channel.

LAGUNA DOMINGUEZ CHANNEL MAP 30a

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
11. Rosecrans Ave. to 135th St. TG 63 C1	Vert. Sides C Bottom C	E	12' paved ②	ROW Channel	Yes Yes	SF ③	3 B13
		W	12' paved ②	Channel ROW	Yes No	C ②	

Survey Notes

- ① Crossings and inlets:
135th St. (G): Channel enters from E just N of bridge. Tunnel under E side not possible. Moderately busy street.
- ② W access road is used as an entrance drive to small parking areas behind commercial establishments adjacent to the channel on the W side (shop fronts are on Crenshaw). Several of these businesses might serve as destinations for trail users (included are a liquor store, a small disco, Straw Hat Pizza, a restaurant, barber shop, and two bars). Trail-oriented facilities might be provided in the backs of these establishments for Northrop commuters and other trail users.
- ③ SF housing E side, level with ROW, separated by shrubs, walls, wood fences.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
12. 135th St. to Crenshaw Blvd. TG 57 C6	Vert. Sides C Bottom C	E	16' paved ②	ROW Channel	Yes Yes	MF, SF ③, ④, OS	3 B14-B16
		W	12' dirt ②	Channel ROW	Yes Yes	C ③, OS	

Survey Notes

- ① Crossings and inlets:
Channel enters from E side, obstructs E access road just N of 135th.
El Segundo Blvd. (G): Busy street.
Broadway St. RR (G): Paved entrance road to parking lot crosses tracks just E of channel. Probably no problem for bikes to cross here also. Foot bridge just S of RR bridge (no obstruction).
120th St. (G), Crenshaw Blvd. (G): Busy streets. They intersect SW of the 90-degree bend in the channel and can be considered a single major obstruction.
- ② From 120th St. to Crenshaw there is no access along the SW side of the bend in the channel except a short sidewalk. There is a 10' dirt access space on the NE side which has a steep slope.
- ③ SF housing, E side, 135th to El Segundo. Level with ROW, separated by vines, wooden fences.
- ④ Northrop Aviation (both sides of channel from El Segundo to 120th). Good potential for bicycle transportation.
- ⑤ The back of the commercial strip on Crenshaw faces the W access road of the channel. Several of these establishments might be of interest to trail users (a hamburger stand, a Baskin Robbins, a Standard Brands store, and a restaurant are included).
- ⑥ Footbridges between El Segundo and 120th St. do not obstruct access, but at certain times of the day there is enough traffic over them for potential conflict with trail traffic.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
13. Crenshaw Blvd. to Bend at park TG 57 C5	Vert. Sides C Bottom C	N	12' paved ②	ROW Channel	Yes Yes	SF ④	2 B16
		S	None ③	Channel ROW	Yes No	ST, SF ④	

Survey Notes

- ① Crossings:
None
- ② 8' dirt strip N of pavement, 2' higher elevation.
- ③ 35' width from channel to street on S side. Planted with ground cover.
- ④ SF housing from Crenshaw to park, N side. Yards 2' higher than ROW, separated by chain link and vegetation.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
14. Bend at park to 116th St. TG 57 B5	Vert. Sides C Bottom C	E	17' paved	ROW Channel	Yes Yes	OS, SF ②	3 B17
		W	12'-20' dirt	Channel ROW	Yes Yes	SF ②	

Survey Notes

- ① Crossing:
116th St. Channel is covered N of 116th.
- ② SF housing along entire W side and along E side N of park. Level with ROW, separated by chain link fences and shrubs.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
15. Laguna Dominguez to Western Ave. ② TG 63 D1	Trap. Sides C Bottom U	N	16' paved	ROW Channel	Yes No	SF	3 B13
		S	None	Channel ROW	No Yes	ST	

Survey Notes

- ① Crossings and inlets:
Van Ness Ave. (G)
Channel inlet, N side
Western Ave. (G): Channel is underground E of Western.
- ② A detailed survey was not done of this reach.
- ③ This tributary would provide a good feeder to trails along Laguna Dominguez. The access road is in good condition, and very little work would be needed to prepare it for trail use. A second tributary extends N along Wilton, and provides access to Rowley Park.

CENTINELA CREEK MAP 30b

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1. Ballona Creek to Centinela Ave. TG 50 A5	Vert. Sides C Bottom U	N	10' Paved Poor Condition	ROW Channel	Yes Yes	F, V, C, I	839-845
		S	10' Paved Poor Condition	Channel ROW	Yes Yes	S, C, I	

Survey Notes

- ① Crossings and inlets:
Ramp to Invert obstructs S side W of Centinella.
- ② Large amounts of vacant land, both sides of channel, near confluence.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2. Centinela Ave. to Jefferson Blvd. TG 50 B4	Vert. Sides C Bottom C	N	15' Paved	ROW Channel	Yes Yes	F, V	3 846-851
		S	15' Paved	Channel ROW	Yes Yes	SF 2, V	

Survey Notes

- ① Crossings:
Inglewood Blvd. (G): Moderately busy.
Mesmer Ave. (G): Light traffic.
Jefferson Blvd. (G): Moderately busy.
- ② SF homes adjacent to channel at same level, only sometimes screened by shrubbery.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
3. Jefferson Blvd. to Centinela Ave TG 50 C4	Vert. Sides C Bottom C	N	12' Paved 2	ROW Channel	No Yes	F	3 852
		S	12' Paved 2	Channel ROW	Yes Yes	C	

Survey Notes

- ① Crossings:
San Diego Fwy. (G) } Major obstruction. The channel is covered between the fwy. and Sepulveda.
Sepulveda Blvd. (G) }
Centinela Ave. (G): Moderately busy.
- ② Not surveyed from Sepulveda Blvd. to Centinela Ave.

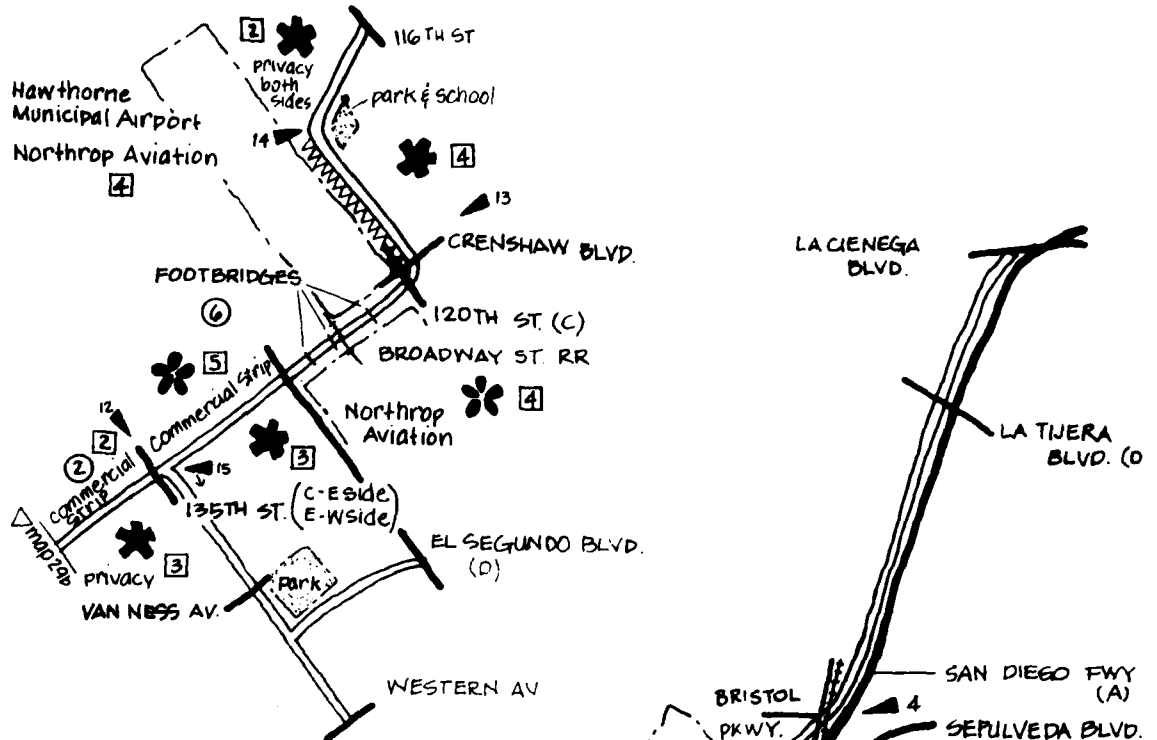
Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
4. Centinela Ave. to La Tijera Blvd. TG 50 C5	Vert. ② Sides C Bottom C	N	10' Dirt	ROW Channel	Yes No	U, 3, V	3 851-858
		S	10' Dirt	Channel ROW	No Yes	I, V	

Survey Notes

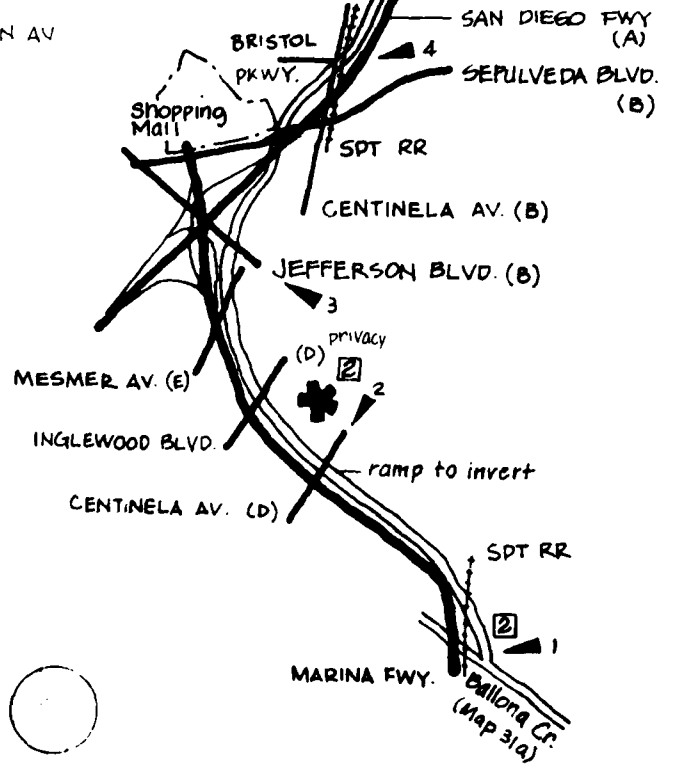
- ① Crossings:
La Tijera Blvd (G) Busy street.
La Tijera Blvd (G) Busy street.
- ② Channel is trap as it approaches La Tijera Blvd
- ③ Other use: abandoned RR ROW.

BALLONA CREEK MAP 31

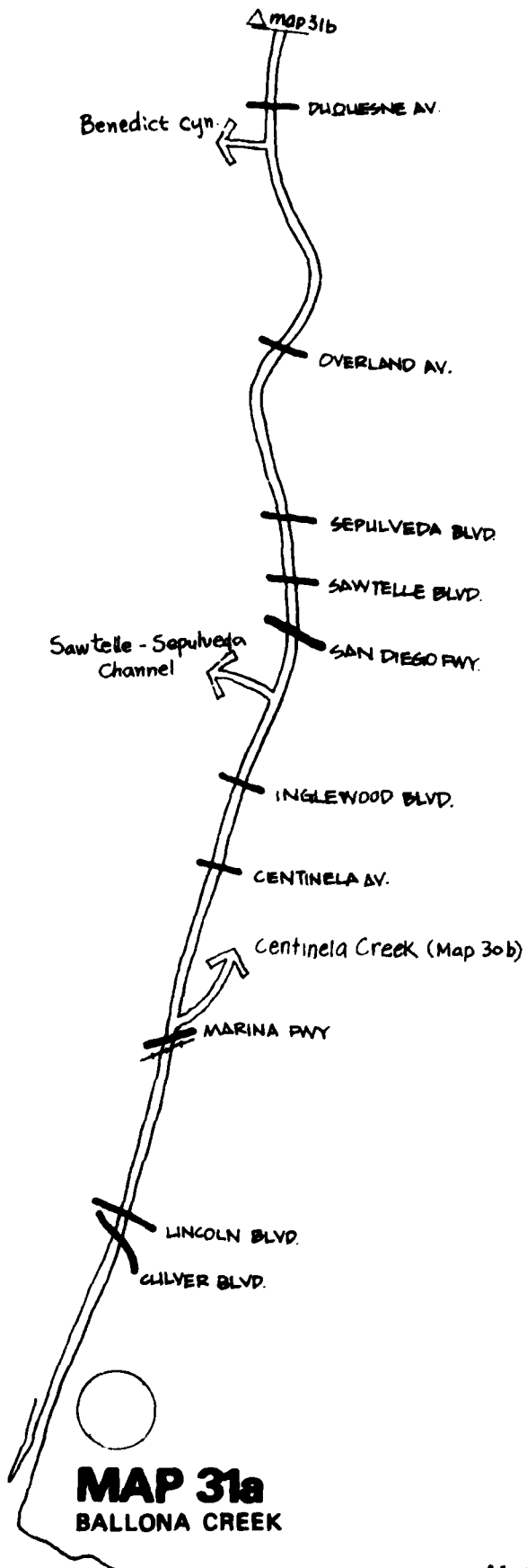
Not Surveyed



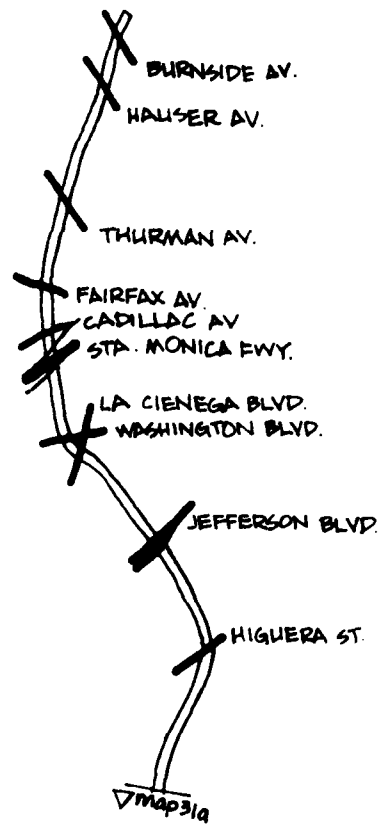
MAP 30a
LAGUNA DOMINGUEZ



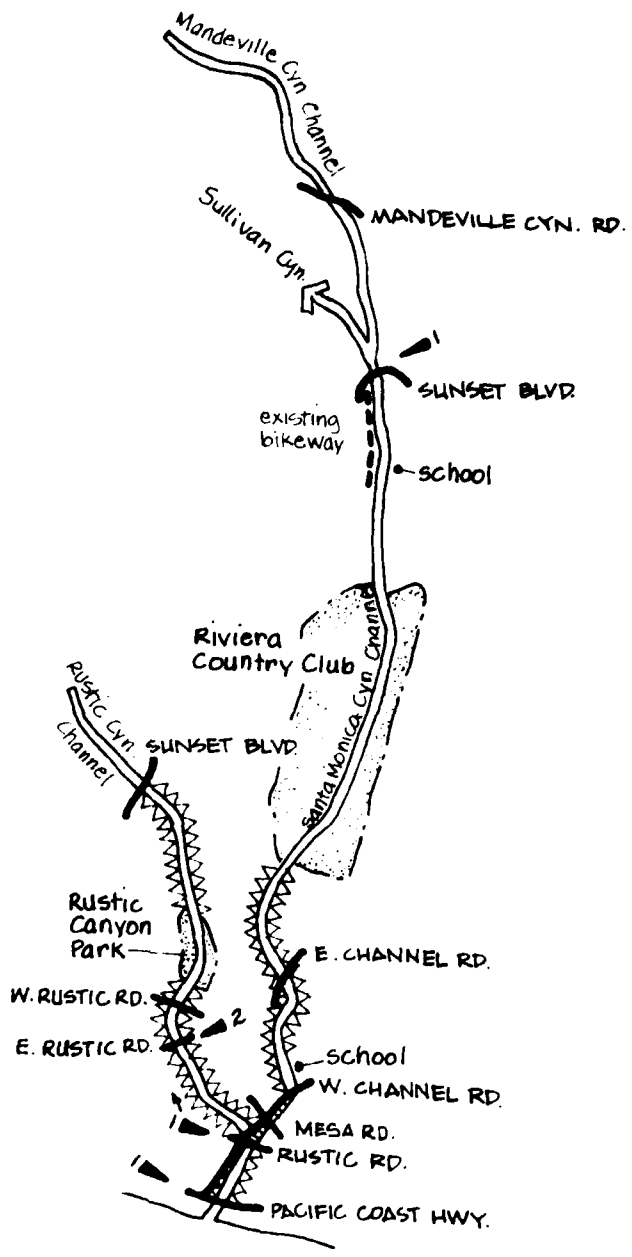
MAP 30b
CENTINELA CREEK



MAP 31a
BALLONA CREEK



MAP 31b
BALLONA CREEK



MAP 32
 SANTA MONICA CANYON
 MANDEVILLE CANYON
 RUSTIC CANYON

SANTA MONICA CANYON CHANNEL MAP 32

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 Pacific Coast Hwy to Sunset Blvd TG 40.05 to 42	West Sides Bottom	W	None (2)	ROW Channel	No Yes	SI, NF, D (1)	R11-R21
		E	None (2)	Channel ROW	Yes No	SI, NF, D (1)	

Survey Notes

- (1) Crossings and inlets:
 Pacific Coast Hwy (G): Busy street.
 Rustic Rd (G): Light traffic.
 Rustic Canyon Channel inlet obstructs N side access.
 W Channel Rd (G): Light traffic.
 E Channel Rd (G): Light traffic.
 Sunset Blvd (G): Busy street.
- (2) Access obstructed or restricted along entire reach by residences and country club.
- (3) Other city use: Riviera Country Club.

MANDEVILLE CANYON CHANNEL MAP 32

Channel is covered from Sunset to Mandeville Canyon Rd. Not surveyed N of Mandeville Canyon Rd.

RUSTIC CANYON CHANNEL MAP 32

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
1 West Channel Rd to East Pacific Rd TG 40.05 to 44	West Sides Bottom (2)	W	None (3)	ROW Channel	No Yes	SI	R11-R24
		E	None (3)	Channel ROW	Yes No	SI	

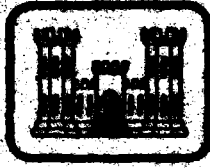
Survey Notes

- (1) Crossings:
 W Channel Rd (G): Light traffic.
 E Rustic Rd (G): Light traffic.
 Numerous private driveways (G).
- (2) Channel is very shallow - about 4' deep.
- (3) Access obstructed along entire reach by residences.

Reach	Channel	Side	ROW Access	Fence or Wall	Adjacent Use	Appeal	Photographs
2 East Pacific Rd to Sunset Blvd TG 40.03 to 44	(2)	W	None (3)	ROW Channel	No No	SI, US	25
		E	None (3)	Channel ROW	No No	SI, US	

Survey Notes

- (1) Crossings:
 West Pacific Rd (G): Light traffic.
 Sunset Blvd (G): Busy street.
- (2) Very well defined channel, about 6' wide.
- (3) Access to channel ROW only - within Rustic Canyon Park.



Appendix 2.
Regional Recreation Areas

Locations of the following recreational facilities are shown in Figure 2, Chapter 3.

1. CHATSWORTH RESERVOIR REGIONAL PARK

Existing: Unimproved natural area

Proposed: Golf course, water sports, picnic grounds, amphitheater

Total Area: 1260 acres

2. PORTER RANCH PARK

Existing: Picnicking, hiking and riding trails.

Total Area: 436 acres

Operating Agency: Los Angeles City Rec & Parks Department

3. DEVONSHIRE DOWNS

Existing: Exhibit buildings and grounds

Total Area: 51 acres

Operating Agency: 51st Agricultural District and the
CSUN

4. VAN NORMAN LAKES

Existing: Riding and hiking trails, 9-hole golf course, picnicking

Total Area: 1,600 acres

Operating Agency: Los Angeles City Rec & Parks Department

5. SAM FERNANDO MISSION

Existing: Restoration of one of the original missions on El Camino Real,
estab. 1797

Total Area: 10 acres

Operating Agency: Private - open to public

6. EL CARISO REGIONAL PARK

Existing: Multipurpose ball field, swimming pools, tennis complex,
picnic areas, golf course, riding & hiking trails

Total Area: 160 acres

Operating Agency: Los Angeles or County

7. ROGER JESSUP PART

Existing: Picnic areas, children's play area, football, soccer

Total Area: 14 acres

Operating Agency: LA County Parks & Rec. Department

8. CALIFORNIA BUSCH GARDENS

Existing: Concessionary boat rides, botanic gardens, special animal exhibits

Total Area: 17 acres

Operating Agency: Private - open to the public

9. HANSON DAM RECREATION AREA

Existing: Riding & hiking trails, water sports, specialized children's attraction, ball field, golf course, clubhouse, barbeque facilities, outdoor amphitheater, picnic area

Total Area: 1,465 acres

Operating Agency: Los Angeles Rec. & Parks Department

10. SEPULVEDA DAM RECREATION AREA

Existing: Golf course, sportsfield, tennis courts, outdoor gym, picnic area

Total Area: 2,000 acres

Operating Agency: Los Angeles City Rec. & Parks Department, Army Corp of Engineers

11. VAN NUYS - SHERMAN OAKS PARK

Existing: Multiple participants sports facilities, children's play area, tennis

Total Area: 67 acres

Operating Agency: Los Angeles City Rec. & Park Department

12. VERDUGO MOUNTAIN PARK

Existing: Large unimproved park

Total Area: 351 acres

Operating Agency: City of Burbank, Los Angeles & Glendale, and L.A. County Parks & Rec. Department

13. STOUGH PARK

Existing: 18 hole golf course, driving range, amphitheater, picnic

Total Area: 628 acres

Operating Agency: Burbank Parks & Rec. Department

14. BRAND PARK

Existing: Memory Garden, Ball diamonds

Total Area: 19 acres

Operating Agency: Glendale Parks & Rec. Department

15. JOHN ANSON FORD THEATER

Existing: Outdoor amphitheater

Total Area: 29 acres

Operating Agency: Pilgrimage Theater Foundation

16. GRIFFITH PARK

Existing: Griffith observatory, Greek Theater, L.A. Zoo, Travel Town,
5 golf courses, 28 tennis courts, picini, sports, riding, hiking

Total Area: 4,063 acres

Operating Agency: Los Angeles City Rec. & Parks Department.

17. ECHO PARK

Existing: Picnic grounds, children's play area, tennis courts, multiple
participants sports facilities.

Total Area: 29 acres

Operating Agency: Los Angeles City Rec. & Parks Department.

18. LOS ANGELES CIVIC CENTER

Existing: Historical sites and structures, concentration of gov't structures,
landscaped malls, El Pueblo de Los Angeles

Total Area: 228 acres

Operating Agency: Private individuals, Los Angeles, County, State, & U.S.
Government

19. ELYSIAN PARK

Existing: Picnic areas, hiking trails, sports, Dodger Stadium

Total Area: 575 acres

Operating Agency: Los Angeles City Rec. & Parts Department & L.A. Dodgers

20. ERNEST E. DEBS REGIONAL PARK

Existing: Lake, bird sanctuary, picnic grounds

Total Area: 306 acres

Operating Agency: Los Angeles City Rec. & Parks Department

21. SCHOLL CANYON REGIONAL PARK

Existing: Camping, picnic grounds

Proposed: Recreation park, golf course, riding & hiking trails

Total Area: 200 acres

Operating Agency: Glendale Parks & Rec. Department

22. BROOKSIDE PARK

Existing: Rose Bowl (100,000 seat stadium), 2 18-hole golf courses,
recreation park, large picnic grounds

Total Area: 521 acres

Operating Agency: Pasadena Parks Department

23. NORTON SIMON MUSEUM OF ART

24. HUNTINGTON LIBRARY, ART GALLERY, AND BOTANIC GARDENS

Existing: Desert plants, camellias, and Japanese Gardens

Total Area: 200 acres

Operating Agency: Private

25. SAN GABRIEL PLAZA AREA

Existing: Historical structures and site

Total Area: 20 acres

Operating Agency: private individuals, City of San Gabriel, San Gabriel
Plaza Department Assn.

26. EATON CANYON PARK

Existing: Riding and hiking trail stop (Fox Ridges), picnic grounds, nature
museum, overnight camping for groups

Total Area: 742 acres

Operating Agency: L.A. County Park & Rec. Department

27. LOS ANGELES COUNTY ARBORETUM

Existing: Worldwide plant collections, special botanical exhibitions,
educational programs, plant introduction and testing

Total Area: 127 acres

Operating Agency: L.A. County Arboreta & Botanic Gardens Dept.

28. ARCADIA COUNTY PARK

Existing: Multiple participant sports facilities, 18-hole golf course,
picnic grounds, tennis courts, children's play area, tennis
pro shop, senior citizens center, lawn bowling, horseshoes and
shuffleboard, group camping

Total Area: 37 acres

Operating Agency: L.A. County Parks & Rec. Department

29. SANTA FE DAM RECREATION AREA

Existing: Picnicking, fishing, swimming, boating lake, nature center, nature preserve

Total Area: 600 acres

Operating Agency: L.A. County Parks & Rec. Department

31. SAN DIMAS CANYON PARK

Existing: Rustic picnic grounds, nature museum, outdoor cooking facilities, overnight camping for groups, nature trails, horseshoe and shuffleboard courts, play area

Total Area: 137 acres

Operating Agency: L.A. County Parks & Rec. Department

32. MARSHALL CANYON COUNTY PARK

Existing: Riding and hiking trails, day and overnight camping

Total Area: 834 acres

Operating Agency: L.A. County Parks & Rec. Department

33. RANCHO SANTA ANA BOTANIC GARDENS

Existing: Native plants arboretum and graduate school offering PHD in Botany

Total Area: 80 acres

Operating Agency: Private

34. L.A. COUNTY FAIRGROUNDS

Existing: Exhibit buildings and grounds

Total Area: 450 acres

Operating Agency: L.A. County Fair Association

35. FRANK G. BONNELLI REGIONAL COUNTY PARK

Existing: Boating & waterski facilities, fishing, swimming, extensive picnic areas, riding and hiking trails, equestrian center, group camping recreational vehicle campground

Total Area: 1,975 acres

Operating Agency: L.A. County Parks & Rec. Department

36. GANESHA PARK

Existing: Picnic grounds, tennis courts, hiking trails, swimming pools

Total Area: 80 acres

Operating Agency: Pomona Rec. & Parks Department

37.

38. WALNUT CREEK COUNTY PARK

Existing: 3 miles of riding and hiking trails, equestrian assembly area,
rest stops, picnic areas

Total Area: 125 acres

Operating Agency: L.A. County Parks & Rec. Department

39. KELLOGG ARABIAN HORSE FARM

Existing: Horse and horsemanship exhibitions

Total Area: 5 acres

Operating Agency: California State Polytechnic University, Pomona

40. INDUSTRY HILLS CIVIC RECREATION CONSERVATION AREA

41. OTTERBEIN STATE RECREATION AREA

Existing: Hiking and riding trails, special area for the handicap

Total Area: 600 acres

Operating Agency: L.A. County Parks & Rec. Department

42. WHITTIER NARROWS DAM RECREATION AREA

Existing: Picnic grounds, fishing, children's play area, overnight group
camping, hiking and equestrian trails, ball diamonds, archery
skeet and trap, model hobby areas, nature center, and nature study
area

Total Area: 1092 acres

Operating Agency: L.A. County Parks & Rec. Department

43. GREAT WESTERN EXHIBIT CENTER

Existing: Exhibit buildings and grounds

Total Area: 10 acres

Operating Agency: 48th Agricultural District

44. SOUTH GATE PARK

Existing: Multiple participant sports facilities, 9-hole pitch and putt course, 1,500 seat municipal auditorium

Total Area: 93 acres

Operating Agency: South Gate Park & Rec. Department

45. EL DORADO PARK

Existing: Recreation park, 18-hole golf course, childrens fishing lake

Total Area: 791 acres

Operating Agency: Long Beach Parks and Rec. Department

46. LONG BEACH RECREATION PARK AREA

Existing: Recreation park, golf course, water sports, picnic grounds, bowling greens

Total Area: 393 acres

Operating Agency: Long Beach Rec. & Park Department

47. BALDWIN HILLS REGIONAL PARK

Existing: Golf course, amphitheater, picnic grounds, riding and hiking trails

Total Area: 230 acres

Operating Agency: L.A. County Parks & Rec. Department

48. TOMPKINS WAY RESEREVOIR

49. DOCKWEILER STATE BEACH (PLAYA DEL REY)

Existing: Bike trail, restrooms, drinking fountains

50. SANTA MONICA STATE BEACH

Existing: Bike Trail, restrooms, drinking fountains

51. WILL ROGERS STATE BEACH

52. RIVAS CANYON PARK

Existing: Unimproved

Proposed: picnic, riding and hiking, court games, day camp

Total Area: 26 acres

53. WILL ROGERS STATE PARK

Existing: Home of renowned humorist Will Rogers

Total Area: 186 acres

Operating Agency: California Division of Beaches and Parks

54. TOPANGA STATE PARK

Existing: Multiple participant sports facilities, golf course, picnic grounds

Total Area: 170 acres

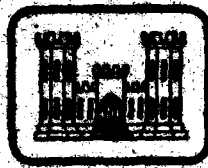
Operating Agency: L.A. County Parks & Rec. Department

55. SYLVIA PARK

Existing: Picnicking

Total Area: 320 acres

Operating Agency: L.A. County Parks & Rec. Department



Appendix 3.
Significant Ecological Areas

Locations of the following areas are shown in Figure 6, Chapter 3.

Those areas within the Los Angeles County Drainage area determined by the Los Angeles County Department of Regional Planning to have ecological significance are listed below. The following classification system is used by the County to indicate the particular significance of each area.

- Class 1: Areas important for the maintenance of plant and animal species that are recognized as being either extremely low in numbers or having a very limited amount of habitat available.
- Class 2: Areas containing biotic resources that are uncommon on a regional basis.
- Class 3: Areas containing biotic resources which are uncommon within the political boundaries of Los Angeles County.
- Class 4: Areas which possess specialized characteristics that are essential to the maintenance of wildlife.
- Class 5: Areas containing characteristics that may be useful in determining taxonomic relationships.
- Class 6: Areas that are important as game species habitat or as fisheries.
- Class 7: Areas that would provide for the preservation of relatively undisturbed examples of the natural biotic communities in Los Angeles County.
- Class 8: Areas possessing special characteristics.

The first class number listed for each area indicates its principle significance. Numbers in parentheses indicate other classes that also apply.

1. Malibu Coastline: Class 2 (3,4,5,6,7)

This is a relatively undisturbed coastal region where upwelling of nutrient-rich waters and a variety of habitats support highly productive and extremely diverse marine communities. This coastline also possesses the only complete, undisturbed sandy beaches remaining in Los Angeles County.

2. Point Dume: Class 3 (4,5,7)

Point Dume is one of two remaining areas in Los Angeles County where a diverse and healthy mixture of terrestrial and marine habitats can be found in close association.

3. Zuma Canyon: Class 3 (4,7)

Zuma Canyon is one of the last major drainages in the Santa Monica Mountains that have a year-round stream and remain in an undeveloped, unroaded condition.

4. Upper La Sierra Canyon: Class 1 (2,3,5,7)

This generally unique canyon contains an unusually rich and diverse aggregation of uncommon canyon flora and dense woodland vegetation.

5. Malibu Canyon/Malibu Lagoon: Class 2(3,4,5,6,7)

This area contains Malibu Creek, which is the only stream bisecting the Santa Monica Mountains. The canyon contains diverse native vegetation that supports abundant wildlife. The lagoon, which is the only one between Pt. Mugu and Anaheim Bay, is an important refuge for migratory birds.

6. Las Virgenes: Class 5 (7)

This area contains a number of plants common to the interior areas of Southern California, but found nowhere else in the Santa Monica Mountain region.

7. Hepatic Gulch: Class 3 (5,7)

This area possesses a vegetative association with many uncommon species and unique ecological relationships.

8. Malibu Creek State Park Buffer Area: Class 8

This buffer area contains watershed critical to the preservation of important biological resources within Malibu Creek State Park and includes several areas with rare and fragile flora.

9. Cold Creek: Class 3 (5,7)

The extreme range in physical conditions in this relatively undisturbed sandstone basin makes it a showplace for an unusually diverse aggregation of native vegetation. It also contains several plant species uncommon to the general region.

10. Tuna Canyon: Class 3 (4,7)

Tuna and Pena Canyons are the last drainages in the central and eastern Santa Monica Mountains that have not sustained development either in the watershed, or between the canyon mouth and the coast.

11. Temescal-Rustic-Sullivan Canyons: Class 7

These contiguous, self-contained watersheds contain representative samples of the dry chaparral and coastal sage scrub plant communities found in the interior canyons of the Santa Monica Mountains.

12. Palo Comado Canyon: Class 3 (7)

This area is one of the last examples of southern oak woodland savannah of any significant size in Los Angeles County.

13. Chatsworth Reservoir: Class 2 (3,7)

The concentration of a variety of habitats and the presence of a large body of freshwater closed to the public offer important wintering and breeding ground for many migratory songbirds and waterfowl, including several uncommon species.

14. Simi Hills: Class 7

This cismontane area contains relatively undisturbed representative examples of most of the biotic communities found in the Simi area.

15. Tonner Canyon/Chino Hills: Class 7

16. Buzzard Peak/San Jose Hills: Class 7

17. Powder Canyon/Puente Hills: Class 7

These three areas in the hilly portions of eastern Los Angeles still support relatively undisturbed, dense stands of southern oak woodland, chaparral, coastal sage scrub, and riparian woodland. Powder Canyon is the only one that contains an undisturbed portion of self-contained watershed.

18. Way Hill: Class 1 (2,3,4,5,7)

Way Hill supports a population of the endangered Dudleya multicaulis, the many-stemmed dudleya.

20. Santa Susana Mountains: Class 7

The Santa Susana Mountains are the main representative of small, dry, interior mountain ranges in Los Angeles County. It supports coastal sage scrub on south-facing slopes, dense chaparral on north-facing slopes, and riparian and oak woodland in the valleys.

21. Santa Susana Pass: Class 1 (2,3,4,5,7)

The endangered Hemizonia minthornii, the Santa Susana tarweed, is found only in the Santa Susana Pass.

22. Santa Fe Dam Floodplain: Class 3 (5,7)

The floodplain behind Santa Fe Dam supports one of the last examples of the arroyo vegetative type, which was once commonly found on the numerous river outwashes of the Los Angeles Basin.

24. Tujunga Valley/Hansen Dam: Class 1 (3,5,7)

The Tujunga Canyon/Hansen Dam area possesses several important features, including open coastal sage scrub vegetation, small pockets of freshwater marsh, and several species of desert slope plants.

25. San Dimas Canyon: Class 3 (4,5,7)

The wash at the mouth of San Dimas Canyon is one of the last remaining areas that supports the more open, flatland type of riparian woodland habitat.

26. San Antonio Canyon Mouth: Class 3 (5,7)

The vegetation found at the mouth of unimproved San Antonio Canyon is the best example of arroyo or wash vegetation remaining in Los Angeles County.

27. Portuguese Bend Landslide: Class 3 (4,5,7)

The Portuguese Bend Landslide area contains the largest amount of natural vegetation remaining on the Palos Verdes Peninsula, which has close floral and faunal similarities to the Channel Islands. There are at least three races of birds and some plant species on the peninsula that are found nowhere else except the Channel Islands.

28. El Segundo Dunes: Class 1 (2,3,4,5,7)

The El Segundo Dunes at the west end of the Los Angeles Airport are the last remnants of a coastal dune system that contains vegetation uncommon in Southern California and not found elsewhere in the country. The Dunes are the only habitat of the endangered El Segundo Blue butterfly (Shijimaeoides battoides allyni).

29. Ballona Creek: Class 1 (2,3,4,5,7)

Ballona Creek is one of two remaining remnants of salt marsh between Ventura County and the Los Angeles-Orange County line. The unusually productive marine and terrestrial habitat contains the endangered Belding's savannah sparrow (Passerculus sandwichensis beldingii) and the California least tern (Sterna albifrons brownii).

30. Alamitos Bay: Class 1 (2,3,4,5,7)

This area is one of two remaining examples of salt marsh found in Los Angeles County. This unusually productive habitat probably contains the endangered Belding's savannah sparrow (Passerculus sandwichensis beldingii).

31. Rolling Hills Canyons: Class 3 (4,5,7)

The Rolling Hills Canyons are one of the last remaining areas of natural vegetation on the Palos Verdes Peninsula, which has close floral and faunal similarities to the Channel Islands. There are at least three races of birds and some plant species on the peninsula that are found nowhere else except the Channel Islands.

32. Agua Amarga Canyon: Class 3 (4,5,7)

Agua Amarga Canyon is the last remaining relatively undisturbed drainage on the coastal side of the Palos Verdes Peninsula. There are at least three races of birds and some plant species on the peninsula that are found nowhere else except the Channel Islands.

33. Terminal Island: Class 1 (2,3,4,5,7)

The endangered California least tern (Sterna albifrons brownii) breeds regularly on Terminal Island and at Ballona Creek. In Los Angeles County, nesting colonies have been found only sporadically at other locations.

34. Palos Verdes Peninsula Coastline: Class 2 (3,4,5,6,7)

Unparalleled headlands, rocky shoreline, and the land-sea interface provide for a tremendous variety of biotic resources in this area. It is one of the most biologically diverse and productive regions in Los Angeles County.

35. Harbor Lake Regional Park: Class 3 (4,5,7)

36. Madrona Marsh: Class 3 (4,5,7)

Harbor Lake Regional Park and Madrona Marsh are the two remaining wetlands in the South Bay area. They support a great diversity of wildlife, including amphibians and many types of migratory birds.

37. Griffith Park: Class 7

An island surrounded by urban and suburban development, Griffith Park supports coastal sage scrub, chaparral, riparian, and southern oak woodland communities.

39. Encino Reservoir: Class 7

This area contains the best undisturbed stand of inland chaparral, coastal sage scrub, and streamside vegetation remaining on the inland slope of the Santa Monica Mountains.

40. Verdugo Mountains: Class 7

The Verdugo Mountains are an extensive, relatively undisturbed island of natural vegetation in an urbanized metropolitan area. Chaparral, coastal sage scrub, and riparian communities provide habitat for diverse and abundant fauna.

42. Whittier Narrows Dam County Recreation Areas: Class 3 (4, 5, 6, 7)

The Whittier Narrows REcreation Area is composed of approximately 1,400 acres within the flood plain of the San Gabriel River. In addition to recreation facilities, the area contains a Nature Center, a 79-acre raptor management area, and an important riparian habitat containing 25 acres of open water.

43. Rio Hondo College Wildlife Sanctuary: Class 8

Located at the west end of the Puente Hills, the Sanctuary is composed mostly of coastal sage scrub. North-facing slopes and the canyon basin, however, support stands of southern oak woodland and patches of grassland with annuals.

44. Sycamore and Turnbull Canyons: Class 7

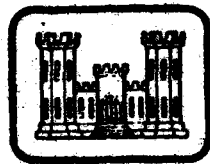
Sycamore and Turnbull Canyons, located within the Puente Hills, contain excellent examples of relatively undisturbed native communities.

45. Dudleya densiflora Population: Class 2 (3, 5, 7)

This area contains a significant stand of Dudleya densiflora, a rare and endangered species that is endemic to California.

62. Galium grande Population: Class 1 (2, 3, 4, 5, 7)

The endangered Galium grande, an endemic species of bedstraw, is highly restricted in distribution. It is found only at isolated localities on the south slope of the San Gabriel Mountains.



Appendix 4.

Persons, Agencies, and Organizations Contacted

1. FEDERAL

Forest Service:

Pasadena - Marty Nall, Carl Summerfield, Art Smith
Tujunga District Station - Jeff Bailey

National Park Service, Los Angeles:

Bill Anderson

2. STATE

Department of Parks and Recreation:

Sacramento - Heather Fargo (funding sources), Dick Troy
Los Angeles - Richard Felty

Public Utilities Commission, Los Angeles:

Mr. Stewart

CALTRANS, Los Angeles:

Bob Blythe, Martin Leis

3. REGIONAL

Southern California Association of Governments:

Brian Ferris

4. LOS ANGELES COUNTY

Department of Parks and Recreation:

Jim Park, Chris Jarvi, Richard Mayer, Michael Long
(biologist)

Road Department:

Robert Larson, Jim Huntley, Don Mosher, Bruce Whitehead

Flood Control District:

John McElroy, Gerald Iwamoto

Department of Regional Planning:

George Malone, Larry Charness

Eaton Canyon Nature Center:

Ray Jillson

Los Angeles County Transportation Commission:

Joe Leach, Richard Olson

(Note: LACTC was created by an act of the State Legislature and is neither a county nor a state agency.)

Supervisor Burke's Office:

Linda Taroff

5. CITY OF LOS ANGELES

Department of Recreation and Parks:

Al Carmichael, Joel Breithart, Ted Heyl

Department of City Planning:

Mr. Yoshinaga (bikeway planning), Steve Crowther, Larry Bloom (equestrian trails), Frank Parrello

Department of Transportation:

Wilbur Takashima (bikeway coordinator), Robert Takasaki

Bureau of Engineering:

Art Rich, Alan Wong

Councilman Ronka's Office:

Kay Franklin

Bicycle Advisory Committee:

Alex Baum

6. OTHER CITY AGENCIES

Arcadia City Planning Department:

Burbank Parks and Recreation Department:

Doug Kotlar

Claremont City Planning Department:

Maxine Cearley

Glendale Parks and Recreation Department

Henry Agonia

Long Beach Department of Engineering:

Jim Chen

Pasadena City Planning Department:

David Dias

Pasadena Public Works Department:

David Barnhardt

East San Gabriel Valley Bikeway Committee:

Ray Diaz, Patrick Murphy, Joanne Chapin, Craig Jennings

7. CITIZENS' GROUPS, PRIVATE ORGANIZATIONS, AND INDIVIDUALS

Audubon Society:

Ann Foster

Eaton Canyon Riding Club:

Equestrian Trails, Inc.:

Glenn Haschenburger, Peno Dwinger, Peter McGuire

Friends of the Arroyo:

Roland Case Ross, David Jones

Imbertson and Associates, Los Angeles (inflatable dams):

Iredale, Ralph, Santa Monica (air rights study):

Los Angeles Wheelmen (bicycle club):

Hall Munn

Paddock Riding Club:

Mr. Weiss

River Ridge Stables:

Jackie Barnette

Small Wilderness Areas Preservation, Verdugo - San Rafael
Chapter:

Jane Conway

Via Verde Equestrian Center:

Dorothy Miller (provided information concerning the need
for an equestrian underpass on Walnut Creek at the San
Bernardino Freeway)

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