

UNIT 527

REFUGIO STATE BEACH

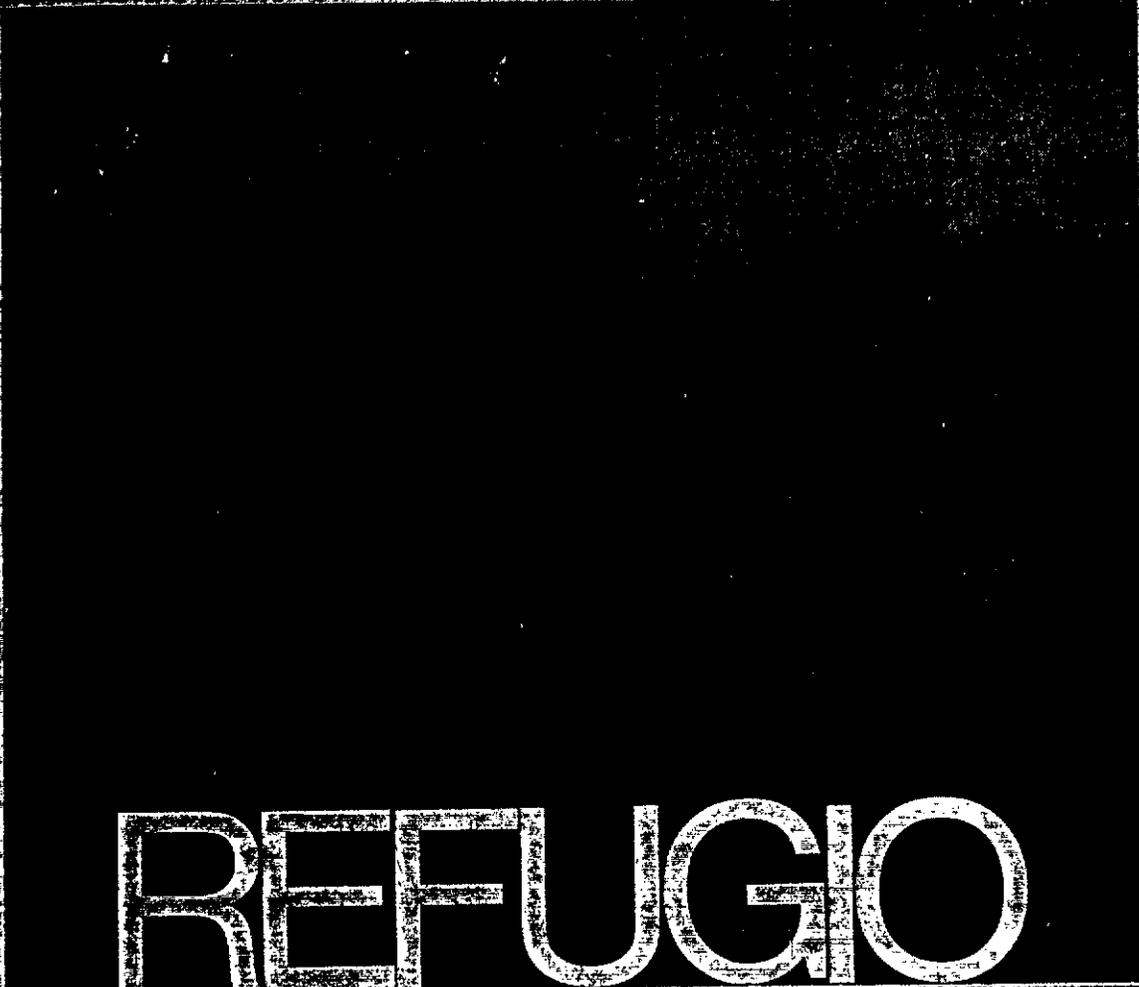
GENERAL PLAN

June 1979

LIB 85N



Santa Barbara/Ventura Coastal State Park System General Plan



REFUGIO

Department of Parks & Recreation
Santa Barbara County Resource Agency
1700 E. Santa Barbara Avenue, Santa Barbara, CA 93101
PRELIMINARY - MAY 1979



Prepared By:

| | |
|-------------------|--|
| Robin Etinger | Assistant Landscape Architect |
| Dorothy Gates | Assistant Landscape Architect |
| Shuan Long | Assistant Landscape Architect |
| Master Maddox | Associate Landscape Architect |
| Hank Ormann | Associate Landscape Architect |
| Wayne Paulkins | Associate Civil Engineer |
| Bob Pecora | Associate Architect |
| Dave Schaub | Resource Ecologist |
| John Kelly | Archaeologist |
| Peggy Akins | Park Interpretive Specialist |
| Denise Cahill | Assistant Park and Recreation Specialist |
| Jeff Cohen | Research Writer |
| Mary Lowe | Senior Graphic Artist |
| Jess Enjalva, Jr. | Graphic Artist |

Supervised By:

| | |
|-------------------|---|
| Alan K. Kolster | Senior Landscape Architect Project Manager |
| Richard A. May | Chief, Development Division |
| James R. Irwin | Chief, Resource Preservation and Interpretation Division |
| Michael W. Martin | Supervising Landscape Architect |
| Barbara A. Meyer | Supervisor, Natural Heritage Section |
| Wynne K. Riddell | Supervisor, Cultural Heritage Section |
| James B. Wolfe | Senior Park and Recreation Specialist |

With Thanks To:

- Kenzie Carter, Assistant Landscape Architect, Auburn, Planning Program
- Genea Stoneham, Supervisor of the Parks and Recreation Public Information Office
- George Panell and the Delineation Section
- The Word Processing Center
- The many citizens who have helped shape this plan through participation in planning workshops and meetings
- Link routes with the Federal, State, County, and local public agencies who have cooperated in the development of this plan.



Santa Barbara/Ventura Coastal State Park System General Plan

VOLUME 4

preliminary

GENERAL PLAN

REFUGIO

STATE BEACH

EDMUND G. BROWN JR.
GOVERNOR

HUEY D. JOHNSON
SECRETARY FOR RESOURCES

RUSSELL W. CAHILL
DIRECTOR

department of parks & recreation

State of California—the Resources Agency
P.O. Box 2390 • Sacramento, 95811

MAY 1979



This is the fourth in an eight-part document which is the General Plan for seven coastal State Park System units in Santa Barbara and Ventura counties. To obtain complete information for any one of the units, two booklets are needed -- the Summary, Introduction, and General Information booklet and the booklet that pertains specifically to the unit. Below is a list of all the booklets that make up the General Plan.

| <u>Volume Number</u> | <u>Name</u> |
|----------------------|--|
| 1 | Summary, Introduction, and General Information |
| 2 | Point Sal State Beach |
| 3 | Gaviota State Park |
| 4 | Refugio State Beach |
| 5 | El Capitan State Beach |
| 6 | Carpinteria State Beach |
| 7 | San Buenaventura State Beach |
| 8 | McGrath State Beach and Natural Preserve |

Refugio State Beach -- Volume 4

CONTENTS

| | <u>Page</u> |
|--|-------------|
| GENERAL DATA. | 1 |
| RESOURCE ELEMENT. | 5 |
| Unit Identification and Classification. | 7 |
| Resource Summary and Evaluation | 8 |
| Scenic Values. | 8 |
| Climate. | 8 |
| Geology and Seismicity | 9 |
| Soils. | 9 |
| Biotic Features. | 11 |
| Cultural Resources | 13 |
| Recreation Potential | 14 |
| Interpretive Potential | 14 |
| Declaration of Purpose. | 14 |
| Declaration of Resource Management Policy | 14 |
| Allowable Use Intensity | 16 |
| Considerations in Determining Allowable Use Intensity | 17 |
| LAND USE AND FACILITIES ELEMENT | 21 |
| Existing Conditions and Assumptions | 23 |
| Planning Issues | 25 |
| Facility Recommendations. | 26 |
| Summary of Proposed Facilities. | 28 |
| Capacity of Facilities. | 28 |
| Summary of Existing Structures with Recommendations | 30 |
| Transportation. | 32 |
| Interpretation. | 32 |
| Local Coastal Plan Recommendations. | 32 |
| Potential Acquisition | 33 |
| Concessions Element | 34 |
| Figure 1: Ratings of Physical Limitations to Development by Soil Type. . | 17 |
| Appendix Maps | 35 |
| 1. Vicinity | |
| 2. Geology | |
| 3. Soils | |
| 4. Vegetation | |
| 5. Cultural Resource Sensitivity | |
| 6. Allowable Use Intensity | |
| 7. General Plan | |

DEPARTMENT OF PARKS AND RECREATION

STATE PARK AND RECREATION COMMISSION

O. BOX 2390, SACRAMENTO 95811

Resolution 36 - 79
Resolution adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Santa Barbara
July 13, 1979

WHEREAS, The Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed General Plan for the Santa Barbara/Ventura Coastal State Park System; and

WHEREAS, This reflects the long-range development plan as to provide for the optimum use and enjoyment of the unit as well as the protection of its quality;

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's General Plan for the Santa Barbara/Ventura Coastal State Park System, preliminary dated May 1979, subject to the following amendments:

1. Delete from Carpinteria State Beach Preliminary General Plan the final sentence of Paragraph 2 at Page 23 which presently reads as follows: "Provide parking for concession patrons."
2. Insert at Page 35 in the Gaviota State Park Preliminary General Plan after the heading "Access Roads" the following footnote:

* "See correspondence dated May 31, 1979 between Director of Parks and Recreation and the Public Utilities Commission on the subject which is attached hereto as part of the Appendix."
(Attachment H).

[Condition 3 by the Commission related solely to San Buenaventura State Beach. It is four paragraphs long, and was deleted from this copy to save space.]

And such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement carrying out the provisions and objectives of said plan.

[Note: See Volume 1 of the Santa Barbara/Ventura Coastal Preliminary General Plan. Attached to that volume is a 26-page Addendum dated Feb 1980 that designates the Preliminary as the Final. A few excerpts follow.]

General Data

REVISIONS TO GENERAL PLAN

ADDENDA: SANTA BARBARA/VENTURA COASTAL STATE PARK SYSTEM GENERAL PLAN

REFUGIO STATE BEACH GENERAL PLAN

- page 3: Under "Facilities", replace "98 day-use" with "77 day-use" and delete "with a trailer sanitation station".
- page 24: Under "PHYSICAL FACTORS" following line 14 ending "potential development", add "Water source is a well located in Refugio Canyon."
- page 26: Under "DISCUSSION", second line, replace "98 day-use" with "77 day-use".
- page 27: a) Top photograph: replace the caption with the following:
"A new multi-use campground will be developed on this old highway bed in the northern portion of the park."
b) Bottom photograph: replace the caption with the following:
"The area near the existing area office could be developed to house interpretive programs and displays."
c) Under #3, at the end of the first sentence, replace "self-contained campers" with a "multi-use campsite".
d) Under #4, replace the second sentence with the following sentence: "The area near the existing office could be developed to house interpretive programs and displays."
- page 28: Replace chart with attached chart.
- :Plan 4-7: General Plan: replace plan with attached plan.

REFUGIO STATE BEACH
GENERAL DATA

Location: On the south-central coast of Santa Barbara County 22 miles west of Santa Barbara on Highway 101.

Size: About 36 hectares (90 acres) with 4,270 meters (14,100 feet) of ocean frontage.

Facilities: 98 day-use parking spaces, 85 campsites, one group campground, 88 picnic sites with a trailer sanitation station, restrooms with showers, and a laundry. A concession store provides food supplies and beach rentals.

Vegetation: The state beach has retained very little of its native vegetation as a result of past agricultural pursuits, development, and landscaping. The state beach now reflects a totally landscaped atmosphere with fan and date palms, Monterey pine, cypress, and various other trees, shrubs, and grasses.

No known rare or endangered plant species are known to occur.

Wildlife: Species possibly occurring include 239 birds, 37 terrestrial mammals, 19 reptiles, and 10 amphibians. Due to the small size and modified nature of natural habitats in the unit, it is likely that many of these species would occur only incidentally.

Outstanding Natural Features: There is excellent beach frontage easily accessible to park users. Steep cliffs border the state beach, making an impressive background. The park area is divided by Refugio Creek, which serves as an aquatic and waterfowl habitat.

Historic and Archeological Values: Refugio contains the poorly preserved remains of three Native American sites which probably made up the village of Qasil (or Kasil). There are two other unnamed sites, one at Canada del Venadito and one at Canada del Corral. The largest of the sites at Refugio, SBa:87, has been excavated twice under the supervision of the Department of Parks and Recreation. Artifacts from this site represent a Canalino-type culture and suggest the latest occupation before A.D. 1500. There are no remains of early Euro-American occupation of the unit, although one of the Ortega Adobes is said to be located nearby.

Interpretive: Refugio State Beach currently has no interpretive center. The unit is very popular with the visiting public and there is good interpretive potential for the unit although not as good as that offered by either El Capitan or Gaviota. Campfire programs have been conducted in this unit with considerable success in the past. Nature walks are practical, although the subject matter is somewhat more limited than in the other units. Marine-oriented topics are good and birdlife and some plantlife walks could be offered. The developed area is entirely planted with materials not indigenous to the area; thus interpretation of native plants is not practical in the developed portion of the unit. Good topics might include history, geology, birdlife, and marine subjects.

Ownership:

Refugio State Beach was acquired in 1959 from Stephen and Jessie Rutherford. It was originally a part of Rancho El Refugio.

Before appropriation of the 1964 bond funds, Refugio consisted of some 14.3 hectares (35.76 acres). Bond funds for acquisition of additions were appropriated by the Legislature in 1967, which made possible the acquisition of all land lying between El Capitan and Refugio seaward of the Southern Pacific railroad.

Resource Element

RESOURCE ELEMENT

This document has been prepared pursuant to Section 5002.2 (amended September 1978) of the Public Resources Code, which requires that a Resource Element be prepared following classification or reclassification of a State Park System unit. In meeting this requirement, this element contains: the declared purpose of the unit in terms of its classification as a state beach; a summary and evaluation of natural and cultural resources; a statement of allowable use intensity; and resource management policies necessary to protect important resource values of the unit for present and future generations to enjoy.

Unit Identification and Classification

Refugio State Beach is located about 37 kilometers (23 miles) west of Santa Barbara between Gaviota State Park and El Capitan State Beach. The area consists of 36 hectares (90 acres) between the coast highway and coastline, including 4,270 meters (14,100 feet) of ocean frontage. Much of the property consists of a narrow strip of terrace land and sandy shoreline. Existing recreation facilities are located around a crescent-shaped cove at the mouth of Refugio Creek.

The terrain of the area is generally flat and gradually slopes toward the wide sandy beach, which is 30 to 60 meters (100 to 200 feet) wide. Improvements include 85 developed family campsites, 1 group campground, 88 picnic sites, day-use parking, and a snackbar-camping supply concession.

The upcoast or western-most border of the unit lies about 1.6 kilometers (1 mile) west of the cove area. The downcoast border adjoins El Capitan State Beach about 3.2 kilometers (2 miles) to the east. State Highway 101 forms the northern boundary of the unit. The Southern Pacific railroad line crosses the property.

Vehicular access to the state beach is by an offramp from Highway 101. Visitor vehicle traffic in the unit is restricted to paved roads in the main development area. A paved bikeway along the terrace between the parking areas at El Capitan and Refugio is partially constructed and is scheduled to be completed in 1979. Roadway access to the terrace on the western border of Refugio is available to authorized vehicles.

The unit was classified a state beach in June, 1962 by the then State Park Commission. A state beach is a category of state recreation unit. The Public Resources Code (Section 5019.56) defines these units as follows:

State recreation units consist of areas selected, developed, and operated to provide outdoor recreation opportunities. Such units shall be designated by the State Park and Recreation Commission by naming, in accordance with the provisions of Article 1 (commencing with Section 5001) relating to classification.

In the planning of improvements to be undertaken within state recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.

State recreation units may be established in the terrestrial or underwater environments of the state and shall be further classified as one of the following types:...

- (d) State beaches, consisting of areas with frontage on the ocean, or bays, designed to provide swimming, boating, fishing, and other beach oriented recreational activities. Coastal areas containing ecological, geological, or scenic resources of significant value shall be preserved within state wildernesses, state reserves, state parks, or natural or cultural preserves.

Resource Summary and Evaluation

The following is a summary of the resource information contained in the Inventory of Features prepared for Refugio State Beach.

Refugio State Beach is in the Coastal Strip Landscape Province. This province includes lands along the immediate coastline of California and offshore islands, where the flora and fauna are directly influenced by the maritime climate.

Scenic Values

When entering the unit, the visitor travels from the frontage road off Highway 101 downhill to the Refugio Creek channel. At this location, the visitor is at the base of both the Southern Pacific railroad trestle and double bridge span of Highway 101. From here, the visitor can drive south under the railroad trestle and enter the developed portion of the state beach. Views at the site are of the lagoon at the mouth of Refugio Creek and of the beach and ocean. Palm trees, Monterey pine, and cypress, which were planted in the area before acquisition by the state, are prominent in the scenery in the cove area.

Noise and engine emissions, produced by traffic on Highway 101 and trains on the Southern Pacific line, are significant negative factors in the visitor experience of Refugio as well as most of the other beach recreation units along this section of the coastline.

Climate

The climate of the region is a Mediterranean-type characterized by partly cloudy, cool summers with little precipitation and mostly fair, mild winters with precipitation occurring as rainshowers associated with passing storms.

The meteorological station nearest to Refugio is located at the Santa Barbara Airport. Records show that during summer months, daytime breezes are generally from the southwest 70 percent of the time and average between 11 and 16 kilometers per hour (7 to 10 miles per hour). During evening hours, breezes are generally calm. In the fall, southerly breezes of 11 to 14 kmph (7 to 9 mph) are dominant 45 percent of the time.

Historical temperature data indicate that average high temperatures range from 21° to 24° Celsius (C.) 70° to 75° Fahrenheit (F.) from May through November. Average low temperatures range from 10° to 13° C. (50° to 56° F.) except for 7° C. (44° F.) in November. During summer months extreme highs of 35° to 38° C. (95° to 100° F.) have been recorded. During winter, average daily high temperatures average 18° C. (60° F.) with nighttime lows between 4° C. (39° F.) and 9° C. (48° F.). Extreme low temperatures for the months of November through March were slightly below freezing, -3° C. to -1° C. (26° F. to 31° F.).

Annual precipitation in the area is about 35 centimeters (14 inches), of which 90 percent falls between November and April. In about one year in ten, annual rainfall can be expected to be less than 23 centimeters (9 inches), or more than 71 centimeters (26 inches).

Geology and Seismicity

The data so far compiled on this unit are useful for general planning purposes but should not be considered an adequate base for actual construction decisions.

Four geologic units have been mapped in the vicinity of Refugio State Beach (see Geology Map, appendix). They are the Rincon Formation, Monterey Formation, terrace deposits, and alluvium.

The Rincon Formation consists of brown-gray, poorly bedded to massive clay marine shale. The Rincon is less stable than the overlying Monterey Formation and, therefore, landslides may occur.

The Monterey Formation is characteristically a series of marine deposits of hard, laminated platy shales, softer shales, phosphatic shales, and limestones. The Monterey is also a noted oil-producing formation. Monterey shale is notable for its unusually large amounts of organic debris, composed largely of remains of microscopic plant and animal life. Chitinous remains of fish scales are also abundant throughout the Monterey. Only the lower Monterey Formation is found in Refugio State Beach. This unit is weakly resistant to erosion but more resistant than the underlying Rincon. It, too, tends to fail by sliding. The lower Monterey weathers to a deep, heavy adobe soil which supports only grasses and annual herbs.

Terrace deposits are present along the coast in this area and are Quaternary in age. These deposits typically contain some fossil material; however, no fossils have been found at this unit.

The youngest deposit present in the state beach is alluvium. Alluvium is derived from soils and rock in the drainage basin.

Refugio State Beach lies between two major Quaternary faults which have had no known displacement during the last 200 years, but were active in the past 500,000 years. These faults are the South Branch of the Santa Ynez and the Arroyo Parida. Both are about 11 kilometers (7 miles) from the state beach. Other potentially active faults are located offshore; thus severe earthquake shaking may occur at this site. Some areas may be subject to ground failure as a result of severe earthquake shaking. Tsunamis (seismic seawaves) may also occur as a result of such earthquakes.

Soils

Several soil series and types occur at Refugio State Beach (see soils, map, appendix). The following is a very brief description of the major soil series.

The camping and day-use developments at the cove area are on reclaimed lands that resulted from filling low, poorly drained areas near the ocean. The kind of material used for fill varied, as well as the depth. The land's use for septic tank absorption fields would be severely limited due to its wetness.

Soils at the existing group campground and terrace land east of the cove are of the Botella series, which consists of well-drained soils formed in alluvium of sedimentary origin on alluvial fans and small valleys. These soils are shaly clay loam and are considered to be moderately erodible. Slow percolation would severely restrict their use for septic tank absorption fields.

The Capitan series consists of well-drained soils formed in calcareous shaly conglomerate on upland areas. Capitan cobbly clay loam occurs on the hillside west of the cove area. These areas are considered highly erodible.

The Diablo series consists of well-drained soils formed in soft shales and mudstone on low hills. These soils are slowly permeable and have a high shrink-swell potential that makes certain development difficult. Diablo clay occurs on some of the terrace land between the cove and El Capitan State Beach to the east. It also occurs around the residences located between the railroad tracks and the western portion of the cove area. These areas would be severely limited as places for septic tank absorption fields due to slow percolation.

Except for the wide sandy beach around the cove, much of the shoreline at Refugio consists of extremely steep bluffs extending from the marine terraces to the narrow beaches below. In most places, the base material near the narrow beach is Monterey shale or soft, highly fractured lightweight shale. Areas near the beach are capped by various alluvial, terrace, or wind-blown deposits. Most of these areas in the unit are subject to wave action during stormy periods and some are subject to wave action at normal high tides. Occasionally, parts of these terraces slough away, with damage to developments above. Uncontrolled concentrations of runoff may cause deep gullies to form quickly in terraces.

The Zaca series consists of well-drained soils formed in calcareous shales and mudstones on uplands. Zaca clay soils occur on the hillside and terrace west of the cove area, including lands on which the old farmhouse is located and on the point of land which juts out beyond the main beach area. This soil type is characterized by a moderate erosion hazard, high shrink-swell potential, and slow percolation.



Increased erosion and maintenance costs can be expected where trail setback from the coastal bluff is not adequate. Some of the storm damage to the bicycle trail between Refugio and El Capitan state beaches is shown.



Exceptional beach conditions and exotic vegetation create a unique tropical-like environment at Refugio.

Biotic Features

Plant life. Refugio State Beach has retained very little of its native vegetation as a result of past agricultural pursuits, development, and landscaping. Only remnants of the coastal sage scrub and grassland plant communities which once covered the area remain on the terrace land between the railroad track and the coastal bluff (see Vegetation Map, apperidix).

The vegetation of the low-lying lands around the mouth of Refugio Creek has been completely changed by the long use of the area as a public park. The area is now totally landscaped with fan and date palms (Washingtonia filifera and Phoenix sp.), Monterey pine (Pinus radiata), cypress (Cupressus sp.), and various other trees, shrubs, and grasses. Scale on the Monterey pines in the group camping area is a recurring problem. Additionally, many of the large cypress trees in the day-use area are dying.

An old residence site and greenhouse on the terrace land west of the cove is densely landscaped with a large variety of palms and cacti. About 60 trees have been randomly planted on the westernmost 4 hectares (10 acres) of this terrace. These trees include pine and cypress, which have grown to a height of 3 to 6 meters (10 to 20 feet), and fan palms which are somewhat taller.

Most of the terrace land and hillside surrounding the cove support exotic grasses and forbs which have entered the area after disturbances by grazing, agriculture, and freeway construction.

The most natural vegetative setting in the unit is the coastal sage scrub community on the headlands just west (upcoast) of the cove and on the terrace land east of the cove. Species in these small areas include coyote bush (Baccharis pilularis var. consanguinea), California sagebrush (Artemisia californica), Haplopappus sp., and others.

A small lagoon formed at the mouth of Refugio Creek supports a small stand of rushes (Juncus sp.), salt grass (Distichlis spicata), and other marsh-type vegetation at its uppermost end, near the unit entrance. The sides of the lagoon are lined with large rock riprap and do not support significant emergent vegetation.

Giant kelp (Macrocystis sp.) occurs in continuous offshore beds along the length of Refugio State Beach in association with rocky substratum. These beds are currently leased for commercial harvest by the California Department of Fish and Game.

No rare or endangered plant species as identified by the California Native Plant Society is known to occur at or near the state beach.

Animal Life. Wildlife at Refugio State Beach is limited due to modifications in most of the area, the number of natural habitat types present, and the small acreage involved.

The landscaped parts of the state beach, including the entire cove area and some of the coastal terrace land, provide suitable habitat for species which have adapted to the presence of people. Representative species of birds include scrub jay, rock dove (domestic pigeon), starling, and house sparrow. The railroad trestle and Highway 101 bridge at the entrance of the unit are used extensively by nesting cliff swallows during the spring. Common mammals of the area include deer mouse (Peromyscus maniculatus), broad-handed mole (Scapanus latimanus), black-tailed hare (Lepus californicus), Botta pocket gopher (Thomomys botta), and Beechey ground squirrel (Otospermophilus beecheyi).

The grassland fields in and around the unit were highly modified through past land use and provide habitats for many of the species common to landscaped areas. In addition, such species as Audubon cottontail (Sylvilagus audubonii) and coyote (Canis latrans) can be expected in this habitat.

The coastal sage scrub community occurs only as small islands in the unit and as such there is not sufficient habitat area to accommodate the number and diversity of wildlife characteristically found in this type of habitat. Birds are probably the most observable group of animals in these areas, including bushtit, rufous-crowned sparrow, California thrasher, wrentit, and brown towhee. Rodents are typically abundant in this type of habitat and include such species as Pacific nimble kangaroo rat (Dipodomys agilis), California mouse (Peromyscus californicus), and California pocket mouse (Perognathus californicus).

Larger mammals which may occur in these regions include long-tailed weasel (Mustela frenata), gray fox (Urocyon cinereoargenteus), and coyote. Some of these species may be found in the area only infrequently because of the very limited amount of coastal scrub habitat available.

The littoral (shoreline) zone and lagoon at the mouth of Refugio Creek provide feeding and resting habitat for a wide variety of water birds. Birds commonly seen foraging and probing for food along the beach include sanderling, whimbrel, willet, and killdeer. Representative species found in and around the lagoon include pied-billed grebe, ruddy duck, great blue heron, American coot, western gull, and herring gull.

Refugio State Beach is not known to provide important habitat for any of the seven endangered or rare wildlife species that range along the coastal region. However, the endangered brown pelican feeds in the nearshore waters off most of southern California, including the Refugio area.

Cultural Resources

(Detailed regional information can be found in Volume 1 of this General Plan.)

One of the first known references to the Refugio area was made in 1769 by Fr. Juan Crespi, who was the diarist for the Juan Gaspar de Portola expedition. On his journey up the coast, Crespi wrote that "about a half a league before here (Tajiguas Creek) there runs a stream through another hollow (Refugio Canyon) at which we saw an old abandoned village, and it seemed a better place to me than this one (Tajiguas), and more extensive."

By 1774, when the Anza expedition passed through Refugio, it was occupied by Indians. In February of that year the abundance of fish was noted at the villages the expedition passed through, one of which was Refugio. Fr. Font, who was with the expedition, stated that after leaving Refugio "after a little starting we came to the abandoned village (Tajiguas) whose Indians went to Rancheria Nueva (Refugio) because of war their enemies made upon them."

Jose Francisco de Ortega, who was the scout on Portola's expedition that discovered San Francisco Bay and the Golden Gate, petitioned the Spanish King in 1785 for a grant of land which included the state beach site. This was the channel coast's first Spanish land grant - Nuestra Senora del Refugio. Ortega's progeny inherited the rancho after his death in the early 1800s and established an adobe-walled settlement a mile inland.

Yankee traders would come close to shore in Refugio Bay at high tide and exchange their trade goods for hides, tallow, wine, and leather goods processed at the Ortega settlement. This was considered smuggling by Spain since all business with foreign countries was forbidden. For a while, Refugio became one of the chief contraband ports on the channel coast. Its influence was great enough that in 1818 it was raided by the men of two pirate vessels. The Ortegas were forewarned of the attack and escaped injury by fleeing to the San Ines Mission. The pirates burned their settlements, killed some stock, and vandalized the garden and vineyards. What happened to the Indians who were staying at the settlement during the attack was not recorded.

After Mexico revolted and became independent of Spain in 1822, the only immediate change along the channel was the legalization of trade with foreign countries. In 1834 the Mexican government confirmed the title of Nuestra Senora del Refugio to Don Jose Vincente Ortega, the grandson of Jose Francisco de Ortega.

In 1869 W.W. Hollister, along with the Dibble brothers, purchased the Ortega Rancho. They used it mainly for sheep pasture. After the death of Hollister in 1886, the property was passed on to his son, John J. Hollister. In later years, the cove area was used as a county park. It was acquired by the state in 1959.

Existing Sites and Features. Refugio contains the poorly preserved remains of three Native American sites which probably made up the village of Qasil (or Kasil). There are two other unnamed sites, one at Canada del Venadito and one at Canada del Corral. Portions of the largest of the sites at Refugio have been excavated on two separate occasions under the supervision of the Department of Parks and Recreation. Recovered artifacts represent a Canalino-type culture and suggest a date that would place the latest occupation somewhere before A.D. 1500, with the earliest occupation probably about A.D. 100 to 300.

There are no physical remains of the historic occupations of the area, although the site of one of the Ortégā adobes is said to be located in the vicinity.

Recreation Potential

Recreation at Refugio State Beach is primarily oriented toward the beach and ocean. Beach activity is, at present, the most popular attraction of the unit. Swimming, sunbathing, and picnicking are concentrated at the wide beach in the cove, while beachcombing, fishing, and surfing are pursued along various portions of the ocean frontage. A bicycle trail is partially completed between the cove and El Capitan State Beach.

Recreation facilities in the unit consist of 85 developed campsites, 1 group camp, 88 picnic sites, day-use parking, and a snackbar-camping supply concession. The beach at the mouth of Refugio Creek has the widest expanse of sand in the unit. The shoreline east and west of the cove consists of narrow sandy areas between rocky terrace outcrops, restricting foot passage along the shoreline at high tides. These sandy areas provide semi-secluded spots for picnicking and sunbathing.

Interpretive Potential

Refugio State Beach offers good ocean and beach recreation interpretive potential. A bike trail linking Gaviota and El Capitan would lend itself to the interpretation of natural and cultural development along the coast.

Declaration of Purpose

Refugio State Beach was established to make available the sandy ocean beach and related uplands in the vicinity of Refugio Creek for public outdoor recreation use and enjoyment. All public outdoor recreational activities which relate well to the ocean beach and which can be accommodated without impairing the scenic or natural integrity of the site may be provided.

Declaration of Resource Management Policy

It shall be the resource management policy of the State Department of Parks and Recreation to:

1. Perpetuate and enhance the recreational opportunities afforded by this outstanding coastline, together with the scenic and natural features on which such recreational opportunities depend.
2. Coordinate the various activities and uses in such a way that the resources of the area are protected and perpetuated to ensure their continued availability to the public. In planning facilities to facilitate visitor use, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics. In this regard, the department shall strive to ensure that the intensity and capacity of development for public use are in proper relation with the ability of the environmental resources to withstand the impact of visitor use.
3. Regulate various uses for the safety and enjoyment of visitors.

4. Protect the scenic values of the property, including both interior views and views from adjacent lands. All developments in the unit shall be adequately screened by careful siting of facilities and by plantings. Developments that would adversely affect the views available to travelers on the railroad and highway should be avoided.
5. Protect the ocean bluffs and other upland areas from any unnatural erosion. All facilities developed on the uplands portion shall be designed so that additional runoff from impervious surfaces (parking areas, roads, buildings, and trails) will not accelerate erosion. Public access to the shoreline from terrace lands shall be restricted to a few designated access points. These points shall be designated and constructed to facilitate foot traffic to the shoreline with a minimum amount of modification to the bluff profile. Runoff from the uplands shall not be allowed to drain off the bluff along access points unless suitable measures are taken to prevent accelerated erosion.
6. Establish a buffer zone of at least 15 meters (50 feet) wide on the terrace land next to the coastal bluff, where recreational facilities shall be limited to access and interpretive trails. Native grassland or sage scrub-type vegetation shall be encouraged in this buffer area to completely reestablish a more natural landscape, native wildlife habitat, and a natural check on bluff erosion.
7. Do not develop any permanent facilities on eroding areas or sites upslope of eroding areas until detailed studies by competent geotechnical personnel have been made.
8. Develop a program to establish some form of low-growing vegetation (preferably native species) to screen and cover the riprap along Refugio Creek.
9. Identify and block off all volunteer trails which lead to the beach from the terrace and which may adversely impact the environment.
10. In landscaping, use plants native to California, and preferably to the region, to provide a more natural setting and more suitable wildlife foods, and to reduce the need for watering and other costly maintenance. Nonnative species shall be permitted in and near developed areas when suitable native species are not available. No exotic plant shall be introduced that is likely to naturalize and encroach upon natural plant and animal communities.
11. Eliminate or control unwanted exotic (nonnative) plants and weeds. A program to eliminate castor bean, which is poisonous to humans, shall be developed and implemented. Hand, mechanical, and biological control measures shall be given preference over chemical methods of weed control. Herbicides used shall meet all requirements in the department's Pesticide Handbook.
12. Control animal populations, such as ground squirrels, when necessary to minimize potential health hazards to the public. The reduction or elimination of preferred habitat of nuisance species shall be given principal consideration when control becomes necessary.
13. Preserve or properly mitigate before modification cultural resources, Native American or otherwise, in the unit.
14. Administer other values of the unit not specifically mentioned in this section, under guidelines set forth in the department's Policies, Rules, Regulations, and Orders, and Resource Management Directives.

Allowable Use Intensity

California state law (Section 5019.5, Public Resources Code) requires that the department cause to be prepared a land carrying-capacity survey before any recreation development plan is completed. As a step in determining "carrying capacity," the department is using "allowable use intensity," which is a more recreation resource-oriented concept.

The determination of allowable use intensity has three basic interwoven components: (1) management objectives, (2) visitor perceptions and attitudes, and (3) impact of any development and use on natural and cultural resources (the determination of ecological and cultural resource sensitivity).

Management objectives for Refugio State Beach are generally set forth in the statutes defining a state beach (see the unit identification section of this Resource Element).

Visitor perceptions and attitudes are sometimes referred to in relation to "social carrying capacity" and involve assessing what the recreationists perceive as an acceptable recreational environment; what degree of isolation or crowding is acceptable; what amount of site deterioration is acceptable; and other perceptions and attitudes pertaining to the quality of visitors' recreation experience. These factors are very difficult to quantify and are related to social development and the environmental awareness of society.

The third component in determining allowable use intensity involves an analysis of the natural and cultural resources to determine the physical limitations of an area for development of facilities and the ability of the ecosystem to withstand human impact (ecological sensitivity). This analysis is based on a number of considerations including archeological and historical sites and features; scenic values; soils, their erodability and compaction potential; geologic factors, such as slope stability and relief; hydrologic considerations, including potential for pollution of surface or ground water, flooding, or for depleting surface and ground waters through water use; vegetation characteristics, such as durability, fragility, and regeneration rates; occurrence of paleontological strata; and wildlife considerations, such as tolerance to human activity, wildlife population levels, and stability. Additional considerations in determining the ecological sensitivity are rare and/or endangered plants and animals, unique biotic features or ecosystems, or examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

Based on the preceding factors, allowable use intensity for Refugio State Beach was determined and delineated (see Allowable Use Intensity Map, appendix). Included in the figure is a general description of the types of activities which may be appropriate in the categories of high, moderate, and low uses. These activities are given for general planning purposes only. On-site field investigation by qualified resource specialists will be necessary before selection of specific sites and design of new facilities. Such investigations may indicate that a higher or lower use intensity is appropriate.

Basic data that are used in the analysis of use intensity with respect to various soils limitations are now discussed in detail.

Considerations in Determining Allowable Use Intensity

Consideration of soil characteristics and qualities, including but not limited to permeability, shrink-swell potential, erosion potential, slope stability, and strength of substrata, is an essential part of planning for recreation use. The limitations of each soil type identified in Refugio State Beach for small structures, local roads and streets, camping areas, picnic areas, paths and trails, and septic tank absorption fields are individually rated in Figure 1. This rating, and the following discussion was largely excerpted from Shipman (1977), Soil Survey - Santa Barbara County, California, South Coastal Park Interim Report.

Data presented in this section are useful for land use planning and for choosing alternative practices or general designs that will overcome unfavorable soil properties and minimize soil failures. Limitations to the use of these data, however, should be well understood. First, the data are generally not presented for soil materials below a depth of 1.5 to 1.8 meters (5 to 6 feet). Also, because of the scale and details of mapping, small areas of soils that differ from the dominant soil may not be included. Thus, these data do not eliminate the need for on-site investigations and testing.

Building/Site Development

The degree and kind of soil limitations that affect small structures and local streets and roads are indicated in Figure 1. A slight limitation indicates that soil properties are favorable for the specified use; any limitation is minor and easily overcome. A moderate limitation indicates that soil properties and site features are unfavorable for the specified use, but the limitations can be overcome or minimized by special planning and design. A severe limitation indicates that one or more soil properties or site features are so unfavorable or difficult to overcome, that a major increase in construction effort, special design, or intensive maintenance is required. For some soils rated severe, such costly measures may not be feasible.

Figure 1
Ratings of Physical Limitations
to Development by Soil Type

| Map Symbol | Soil Description | Small Structures | Roads | Camping Areas | Picnic Areas | Paths and Trails | Septic Tank Absorption Field |
|------------|---|--|--|---|---|--|--|
| AGD | Aqueda silty clay loam, 9-15% slopes | <u>Severe:</u> floods | <u>Moderate:</u> floods low strength | <u>Moderate:</u> too clayey slope | <u>Moderate:</u> too clayey | <u>Moderate:</u> too clayey | <u>Moderate:</u> floods slope |
| FW | Aquents, fill areas | <u>Severe:</u> wetness floods | <u>Moderate:</u> wetness floods | <u>Moderate:</u> wetness | <u>Moderate:</u> wetness | <u>Moderate:</u> wetness | <u>Severe:</u> wetness |
| BGC | Botella shaly clay loam, 2-9% slopes | <u>Moderate:</u> slope low strength | <u>Severe:</u> low strength | <u>Moderate:</u> dusty small stones | <u>Moderate:</u> dusty small stones | <u>Moderate:</u> too clayey small stones | <u>Severe:</u> percolates slowly |
| CPF2 | Capitan cobbly clay loam, 30-50% slopes | <u>Severe:</u> slope depth to rock | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> slope depth to rock |
| CPG | Capitan-Rock outcrop complex, 50-75% slopes | <u>Severe:</u> slope depth to rock | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> slope | <u>Severe:</u> percolates slowly |
| DID | Diablo clay, 9-15% slopes | <u>Severe:</u> slope shrink-swell | <u>Severe:</u> shrink-swell low strength | <u>Moderate:</u> too clayey slope | <u>Moderate:</u> too clayey slope | <u>Moderate:</u> too clayey | <u>Severe:</u> percolates slowly |
| TE | Escarments | | | | | | |
| MIC | Milpitas-Positas fine sandy loam, 2-9% slopes | <u>Severe:</u> slope shrink-swell | <u>Severe:</u> shrink-swell low strength | <u>Moderate:</u> percolates slowly | <u>Slight</u> | <u>Slight</u> | <u>Severe:</u> percolates slowly |
| ZAD2 | Zaca clay, 9-15% slopes | <u>Severe:</u> slope shrink-swell slope | <u>Severe:</u> slope shrink-swell | <u>Moderate:</u> too clayey | <u>Moderate:</u> too clayey | <u>Moderate:</u> too clayey | <u>Severe:</u> percolates slowly |

Source: Shipman (1977)

Small structures should be constructed on soils sufficiently stable that cracking or subsidence from settling or shear failure of the foundation do not occur. Ratings in Figure 1 were determined from estimates of shear strength, compressibility, and shrink-swell potential of the soil. Soil texture, plus plasticity and in-place density, potential frost action, soil wetness, and depth to a seasonal high water table indicate potential difficulties in providing adequate drainage for basements, lawns, and gardens. Depth to rock, slope, and large stones in or on the soil are important considerations in the choice of sites for these structures and were considered in determining the ratings. Susceptibility to flooding is also a serious limitation.

Local roads and streets referred to in Figure 1 have an all-weather surface that can carry light to medium traffic all year. They consist of subgrade of the underlying soil material; a base of gravel, crushed rock fragments, or soil materials stabilized with lime or cement; and a flexible or rigid surface, commonly asphalt or concrete. The roads are graded with soils material at hand and most cuts and fills are less than 2 meters (6 feet) deep.

The load-supporting capacity and the stability of the soil, as well as the quantity and workability of fill material available, are important in design construction of roads and streets. The AASHTO and Unified classifications of the soil and soil texture, density, shrink-swell potential, and potential frost action are indicators of traffic-supporting capacities used in making these ratings. Soil wetness, flooding, soil, depth to hard rock or very compact layers, and content of large stones, all of which affect stability and ease of excavation, were also considered.

Recreation Development

Limitation ratings are slight, moderate, and severe. Slight means that only normal site inspection and precautions during planning and construction are required. Development costs should be somewhat less than average. Moderate means that careful site inspection, more than normal precautions and above-average expenditures, are required to overcome the limitations. Severe means that development costs are high and other sites may be more suitable. In some instances, the aesthetic value or location of a site will justify the expenditures required to overcome moderate or severe limitations. The principal factors for specific ratings are shown in Figure 1.

Camp areas are used extensively for tent and small camp trailers and the accompanying activities of outdoor living. Little preparation of the site is required, other than shaping to heavy foot traffic and limited vehicular traffic. The best soils have mild slopes, good drainage, surfaces free of rocks and coarse fragments, and are free from flooding during periods of heavy use. After it rains the surface is firm, but not dusty when dry.

Picnic areas are attractive natural or landscaped tracts used primarily for preparing meals and eating outdoors. These areas are subject to heavy foot traffic. Most of the vehicular traffic, however, is confined to access roads. The best soils are firm when wet but not dusty when dry; are free of flooding during the season of use; and do not have slopes or stoniness that greatly increase costs of site leveling or of building access roads.

Paths and trails are used for local and cross-country travel by foot or horseback. Design and layouts should require little or no cutting and filling. The best soils are at least moderately well drained, are firm when wet but not dusty when dry, are flooded not more than once during the season of use, have slopes of less than 15 percent, and have few or no rocks or stones on the surface.

Sanitary Facilities

Septic tank absorption fields are subsurface systems of tile or perforated pipe that distribute effluent from a septic tank into the natural soil. Favorable soil properties are needed for proper functioning. Only the soil horizons between the depths of 45 to 183 centimeters (18 and 72 inches) are available for this use. Soil properties and site features considered are those that affect the absorption of the effluent and those that affect the construction of the system.

Properties and features that affect the absorption of the effluent are permeability, depth to seasonal high water table, depth to bedrock, and susceptibility to flooding. Stones, boulders, and a shallow depth to bedrock interfere with installation. Excessive slopes may cause lateral seepage and surfacing of the effluent in downslope areas. Also, soil erosion and soil slippage are hazards where absorption fields are installed in sloping soils.

Some soils are underlain with loose sand and gravel or fractured bedrock at a depth of less than 1.2 meters (4 feet) below the tile lines. In these soils, the absorption fields do not adequately filter the effluent, and as a result, groundwater supplies in the area may be contaminated.

Percolation tests are performed to determine the absorption capacity of the soil and its suitability for septic tank absorption fields. These tests should be performed during the season when the water table is highest and the soil is at minimum absorption capacity.

In many of the soils that have moderate to severe limitations for septic tank absorption fields, it may be possible to install special systems that lower the seasonal water table, or to increase the size of the absorption field so that satisfactory performance is achieved.

If the degree of soil limitation is indicated in Figure 1 by the rating slight, soils are favorable for the specified use and limitations are minor and easily overcome; if moderate, soil properties or site features are unfavorable for the specified use, but limitations can be overcome by special planning and design; and if severe, soil properties or site features are so unfavorable or difficult to overcome that major soil reclamation, special design, or intensive maintenance are required.

Cultural Sensitivity

Cultural resources of Refugio State Beach have been rated in terms of their sensitivity and shown on Cultural Resource Sensitivity Map, appendix. Criteria used in the development of the sensitivity maps and policies relating to each sensitivity category are as follows:

High Sensitivity

These sites contain important information for interpreting historic and prehistoric occupation in the project area. However, specific conditions prevent their eligibility for inclusion into the NRHP. These sites may include Native American cultural deposits; small towns or village sites; small isolated Native American deposits or features; and isolated structures or structure foundations.

Management recommendations for these sites are:

Future developments will be planned to minimize direct and indirect impacts on these resources.

Before any anticipated activities in these zones, a qualified archeologist will be consulted for recommendations on alleviating all direct and indirect impacts that may occur.

Projects may be allowed to have an impact on these sites, but only if they can be proved necessary to fulfill overriding public need, and then only after they have been professionally studied and results publicly disseminated.

Resources may be reclassified if justified by future studies.

Moderate Sensitivity

These sites contain limited information for interpreting past activities of Native American and Euro-American populations. These sites have been highly disturbed by erosion or human activities, and only limited archeological research is necessary to retrieve information present. Resource management recommendations for these sites are:

Projects may be allowed to have an impact on these sites after they have been professionally studied and results publicly disseminated.

Resources may be reclassified if justified by future studies.

Land Use and Facilities Element



REFUGIO STATE BEACH

SUMMARY OF PROPOSED FACILITIES

| | <u>Existing</u> | <u>Proposed</u> | <u>Potential Acquisition</u> | <u>Total After Redevelopment</u> |
|----------------------------|---------------------|--------------------|------------------------------|----------------------------------|
| Family Campsites | 85 | 53 | 0 | 138 |
| Day-Use Parking | 77 | 39 | 40 | 156 |
| Picnic Tables | 88 | 30 | 0 | 118 |
| Comfort Stations | 5 | 0 | 0 | 2 |
| Portable Toilets | 0 | 0 | 6 | 6 |
| Group Camps | 1 | 0 | 0 | 1 |
| Trailer Sanitation Station | 0 | 1 | 0 | 1 |
| Visitor Center | 0 | 1 | 0 | 1 |
| Bicycle Trail | 3.2 km (2 miles) | 1.6 km (1 mile) | 2.72 km (1.7 miles) | 7.52 km (4.7 miles) |
| Bicycle Rest Stops | 0 | 2 | 0 | 2 |
| Combination Buildings | 0 | 7 | 0 | 7 |

LAND USE AND FACILITIES ELEMENT

Existing Conditions-Assumptions

Recreation Values

- Refugio offers excellent beach frontage for swimming, surfing, and fishing.
- The visual qualities of the ocean-related coastal area are outstanding. The steep cliffs that border the state beach make an impressive visual frame.
- There are very significant historic and archeological sites at Refugio State Beach. They represent a part of the Chumash and earlier cultures which inhabited the Santa Barbara Coast.
- Existing recreation facilities at the state beach are centered in a crescent-shaped cove at the mouth of Refugio Creek.
- Refugio State Beach is one of the most popular coastal units in the State Park System.
- Overnight camping facilities are the major development in the unit.

Recreation Use

Principal recreation activities include:

- Swimming
- Skin/scuba diving
- Camping (recreational vehicles, tent, group)
- Fishing
- Hiking
- Walking for pleasure
- Jogging
- Nature and history study
- Picnicking
- Bicycling
- Beachcombing
- Sunbathing
- Surfing
- Participating in outdoor sports/games
- Viewing interpretive exhibit
- Attending interpretive program
- Photography
- Sightseeing

- During peak use periods, major recreation facilities are over capacity, with camping turnaways occurring daily. During July and August, there were on the average over 1,700 camper turnaways per month, or over 57 turnaways per day.

- Camping demand along the coast is extremely high with the demand far outreaching present facilities. The state beach receives heavy use in the summer months, operating at or near capacity.
- Most of the recreation areas are substandard due to their age and overuse.
- All structures are in very poor condition and are in need of rehabilitation.
- Along the newly constructed bicycle trail between Refugio and El Capitan, a rest stop should be provided with adequate beach access.
- With the significant historic and natural sites that are present, interpretation should be provided.

Physical Factors

- The primary recreation season is from April to September.
- The potential upcoast acquisition is a steep, narrow coastal strip with limited development potential. Future plans have called for a bicycle-pedestrian path along this bluff. Beach access will be difficult from the trail.
- The downcoast area of the unit is a steep coastal strip with limited development potential. A bicycle-pedestrian trail exists along the bluffs with rest stops proposed.
- Because of poor site drainage, flooding occurs frequently during rainstorms, which in turn directly affects the sewage leaching system. This frequently necessitates closure of the unit for health and safety reasons.
- Southern Pacific railroad tracks split the unit and cause pedestrian access problems for the beach and for any development north of the tracks.
- The lagoon is centered in Refugio and physically divides the campground units.
- The newly constructed water tank has a capacity of 100,000 gallons, which is adequate to support present use and potential development.
- The location for the proposed self-contained recreational vehicle campground has been previously graded and leveled.
- The bluffs up and down the coast from the unit have erodable soil conditions that limit development.

Planning Issues

From our communication with interested people, in letters, interviews, questionnaires, and public workshops, we were able to identify a number of planning issues concerning Refugio State Beach.

Identification of Issues

The following significant issues were identified:

- Improve the site by upgrading and rehabilitating the existing day-use facilities and structures
- Add a recreational vehicle (RV) group campground
- Add a trailer sanitation station (TSS) for recreational vehicle users
- Rehabilitate the sewage disposal system
- Provide interpretation of the area
- Provide better beach access, particularly along the bluffs up and down the coast
- Leave the state beach as it is
- Prevent the periodic flooding of the unit, which causes closures



Inadequate drainage of the campground and picnic areas has caused sewage problems which have led to periodic closure of the park.

Facility Recommendations

Discussion

- Existing recreational facilities include 85 individual campsites, 22 group campsites, 88 picnic sites, 1 group picnic area, 98 day-use parking spaces, and a bicycle/pedestrian trail.
- The state beach is heavily used in the summer months, operating at or near capacity. During July and August there were about 1,700 turnaways per month, or 57 camping turnaways per day.
- Currently, all structures and facilities are in very poor condition, particularly the water supply and sewage disposal systems. Because of poor site drainage, flooding occurs frequently during rainstorms, which in turn directly affects the sewage leaching system, creating health and safety problems. Closures occur several times a year because of this situation.
- The unit has a rich and colorful history of Native American use.
- There are excellent ocean views at rest stops on a proposed bicycle/hiking trail.
- The western portion of the unit to the north of the railroad tracks (see General Plan), is a desirable location for self-contained recreational vehicles. The specific location is generally buffered from Highway 101 and the rest of the unit. The area offers excellent ocean views.
- Currently, there is no trailer sanitation system (TSS) for recreational vehicles using the unit. The California Administrative Code, Title 17, Section 7992, "Disposal of Sewage Wastes," states that a TSS should be installed, or available, in an accessible location to every public beach campground area in which there are campsites not provided with drain inlets designed to receive the discharge of sewage wastes. TSS should be provided on the basis of one station for each 100 such campsites or portion thereof.

Recommendations

1. All structures (with the exception of the area office) need to be rehabilitated along with the site drainage and sewage disposal systems (see Summary of Existing Structures with Recommendations). Where economical, low water use facilities should be used. Drainage is poor at the campgrounds. A recommended solution would be mounding and earthwork with existing material and direct flow into either the lagoon or ocean. With completion of the earth work, it is recommended that the existing campground facilities be renovated. Sewage disposal will be in the form of leach fields that must be able to handle the heavy soil conditions and constant water percolation. The existing lagoon should also be enhanced at the time the drainage in the campgrounds is corrected.
2. Three proposed bicycle rest stops, located on the bluffs between Refugio and El Capitan state beaches, (see General Plan Map, appendix), will each provide illustrative interpretive panels, a drinking fountain, a bicycle rack to accommodate six bicycles, and a portable toilet.



A new campground for self-contained vehicles will be developed in the northern portion of the park.

3. The area to the west of the unit, north of the railroad tracks (see General Plan Map), will provide a suitable space for self-contained campers. Up to a 50-unit campground could be accommodated to alleviate some camping deficiencies in both the unit and the county. The proposed area is visually screened from the rest of the unit and the highway. Two overgrade pedestrian crossings, one leading to the designated interpretive area and other for the beach access, are proposed. Bluffs on both sides of the Southern Pacific track allow an overgrade crossing (see General Plan Map for location).
4. An interpretive/visitor center building is recommended to be developed to illustrate the significant historic and archeological findings of the area. The existing area office could be expanded and updated to house interpretive programs and displays. It offers ample space for parking. Interpretive panels located on a bluff will illustrate specific historical data for the immediate area and discuss the whale migration visible from the point.



The existing area office will be expanded to house interpretive displays and nature programs.

5. The trailer sanitation station (TSS) is proposed to be located near the entrance station. The TSS will be designed to have the capacity necessary for any future camping development. The station will be visually screened with native vegetation.
6. On the upcoast end of the unit the green barn and trailers will be removed. Both features are visually undesirable due to their location and condition. The barn is unused. The trailers were placed in the area over ten years ago. The sewage disposal is inadequate. The trailers must be constantly shifted back because of the eroding condition of the bluffs. It is recommended that the area be utilized for a bicycle campground to accommodate groups of 10-15 persons. The campground will be adjacent to the designated bicycle trail and is visually screened from the highway. Native plantings will be used to screen the bicycle trail from the campsite.

Summary of Proposed Facilities

| | <u>Existing</u> | <u>Proposed</u> | <u>Potential Acquisition</u> | <u>Total</u> |
|----------------------------|---------------------|--------------------|------------------------------|------------------------|
| Family Campsites | 85 | 54 | 0 | 139 |
| Day-Use Parking | 99 | 0 | 40 | 139 |
| Picnic Tables | 88 | 0 | 0 | 88 |
| Comfort Stations | 5 | 0 | 0 | 5 |
| Portable Toilets | 0 | 0 | 6 | 6 |
| Group Camps | 1 | 0 | 0 | 1 |
| Trailer Sanitation Station | 1 | 0 | 0 | 1 |
| Visitor Center | 0 | 1 | 0 | 1 |
| Bicycle Trail | 3.2 km (2 miles) | 1.6 km (1 mile) | 2.72 km (1.7 miles) | 7.52 km (4.7 miles) |
| Bicycle Rest Stops | 0 | 2 | 0 | 2 |

Capacity of Facilities

Facilities at Refugio State Beach now serve about 215,000 visitors annually. The recommendations in this section include upgrading and enhancing existing facilities and adding new facilities over the next 20-year period. With these proposed additions, it is expected that visitors at Refugio State Beach will increase to nearly 275,000 a year.



The campgrounds are extremely popular and are filled to capacity from April to September.

REFUGIO STATE BEACH
SUMMARY OF EXISTING STRUCTURES WITH RECOMMENDATIONS

| <u>Item</u> | <u>Description</u> | <u>Recommendation</u> |
|-------------|------------------------------------|--|
| R-1 | Contact Station | Replace with a permanent facility |
| R-2 | Comfort Station | Replace |
| R-3 | Concession Facility | Replace |
| R-4 | Comfort Station | Replace |
| R-5 | Comfort Station with Dressing Area | Replace |
| R-6 | Central Lifeguard Station | Replace |
| R-7 | Trellis | Demolish |
| R-8 | Ranger Residence | Rehabilitate |
| R-9 | Ranger Residence | Rehabilitate |
| R-10 | Outbuilding to R-9 | Demolish |
| R-11 | Storage Facility | Demolish |
| R-12 | Storage Shed | Demolish |
| R-13 | Garage to Ranger Residence | Demolish |
| R-14 | Lifeguard Tower | Maintain |
| R-15 | Comfort Station | Replace |
| R-16 | Comfort Station | Replace |
| R-17 | Three Tanks | Verify need and if needed camouflage with landscaping - otherwise demolish |
| R-18 | Green Barn | Demolish |
| R-19 | Mobile Home with Platform | Demolish |
| R-20 | Abandoned Wood Platform | Demolish |
| R-21 | New Area Office | Improve |
| R-22 | Garage | Replace |
| R-23 | Red Barn | Replace |
| R-24 | Water Tank | Verify need. If needed, camouflage with landscaping - |
| R-25 | Equipment/Storage Enclosure | Demolish |
| R-26 | Stone Veneered Concrete Bridge | Maintain |
| R-27 | Water Tank | Verify need. If needed, camouflage with landscaping - |
| R-28 | Asphalt Concrete Slab on Grade | Maintain |

Transportation

Currently, the primary access to Refugio State Beach is via Highway 101.

Public transportation to the unit does not exist. A need for local bus service to Refugio State Beach has not been expressed by the general public.

A practical method of public transportation, other than busing, would be the use of a railroad shuttle system that would utilize the Southern Pacific railroad tracks. Such a system would use a very scenic route to and from the unit. Equipment for picnicking, surfing, and other pursuits could be easily handled and transported.

Interpretation

The interpretive purpose is to heighten the visitor's awareness, appreciation, and understanding of the recreational, cultural, natural, and historic resources of the area.

The primary interpretive themes will be:

Beach and Ocean Recreation
Human Activities

The secondary interpretive theme will be:

Ecological Relationships of the Sandy Beach, Coastal Bluff, and Cove

Interpretive methods to include:

- Brochures on subjects of interest (e.g., geology, biota, wildlife, Indian culture) to be available at the entrance station and at the proposed interpretive/visitor center
- Self-guided and organized tours
- Campfire programs including audio-visual presentations
- Ranger-led "exploration" walks and demonstration workshops
- Outdoor information and interpretive panels
- Exhibits and programs to be housed in a proposed interpretive/visitor center and/or outdoor exhibit area
- The use of "whale flags" during whale migration season to let visitors know that whales have been sighted

Local Coastal Plan Recommendation

The department believes the local coastal plan should reflect the following recommendation:

- It is recommended that the surrounding area remain as it is with no further development

Potential Acquisition

In 1977 the Legislature provided funds for the acquisition of land connecting Gaviota State Park and Refugio State Beach. The two areas now funded and under consideration for acquisition are: land immediately upcoast from Refugio State Beach, and a separated piece just downcoast from the Arroyo Quemado Subdivision. It is the department's policy normally not to acquire developed properties. Acquisition of subdivided land and land currently under development for oil extraction are also being avoided.

It must be noted that acquisitions proposed in this General Plan as additions to existing units of the State Park System are not ensured. Desirable lands must be properly evaluated, selected, funded, negotiated, and transferred before their inclusion in the State Park System becomes a reality. If and when lands are acquired, no development can be permitted until an Inventory of Features and General Plan amendments have been prepared by staff and adopted by the Park and Recreation Commission.

Size: The size of the combined acquisition areas is 13.06 hectares (32.7 acres).

Location: About 35 kilometers (22 miles) west of Santa Barbara.

Access: Highway 101 provides the boundary for the parcels along the inland sides and provides access from the north and south.

Topography and Vegetation: The properties are primarily flat to rolling, fronted on the oceanside by bluffs dropping to narrow beach areas or directly to the ocean. The properties are generally grass-covered marine terraces with a scattering of tree growth. The plant communities are riparian with cypress and eucalyptus screen plantings parallel to the highway.

Existing Land Use

The potential acquisition properties include some existing homesites and undeveloped properties.

Recreation and Preservation Values

The department has embarked on the development of a Class I bike trail extending from Refugio State Beach to Gaviota State Park. The potential acquisitions would provide opportunities to continue the bike trail and provide public access to the beach areas. There have been no cultural surveys made; however, there are previously recorded archeological resources in the area.

Land Use Concepts

The properties would further the attempt to provide a Class I bike trail from Refugio to Gaviota and would provide access to beach areas that are now being reached by trespass. The potential is minimal for permanent facilities such as picnicking and camping. Landscape preservation and visual protection will be emphasized.

Transportation and Circulation

Circulation will minimize automobile use

- Road construction to be minimal
- Non-automobile transportation to be encouraged
- Bicycle/hiking trails to provide access to the resources

Potential Facility Recommendations

Development potential is limited due to the size and topography of the areas.

Basic services and limited access could be met by:

- Trail development
- Limited car parking facilities (40 spaces)
- Sanitary facilities
- Litter receptacles
- Railroad crossings

Concessions

Providing adequate and desirable services and facilities for the use and convenience of the public at Refugio State Beach is an important departmental objective. Limited project funding will be primarily used for basic facilities such as utilities, campgrounds, picnic facilities, buildings, and equipment required for unit operation, protection, and interpretation of natural and cultural resources.

The role of the private sector in providing public facilities and services in units of the State Park System is discussed in Volume 1 of this General Plan.

Existing Situation

The small general store located near the beach is a permanent building. Campers and beach users may purchase retail items and snacks and rent beach equipment.

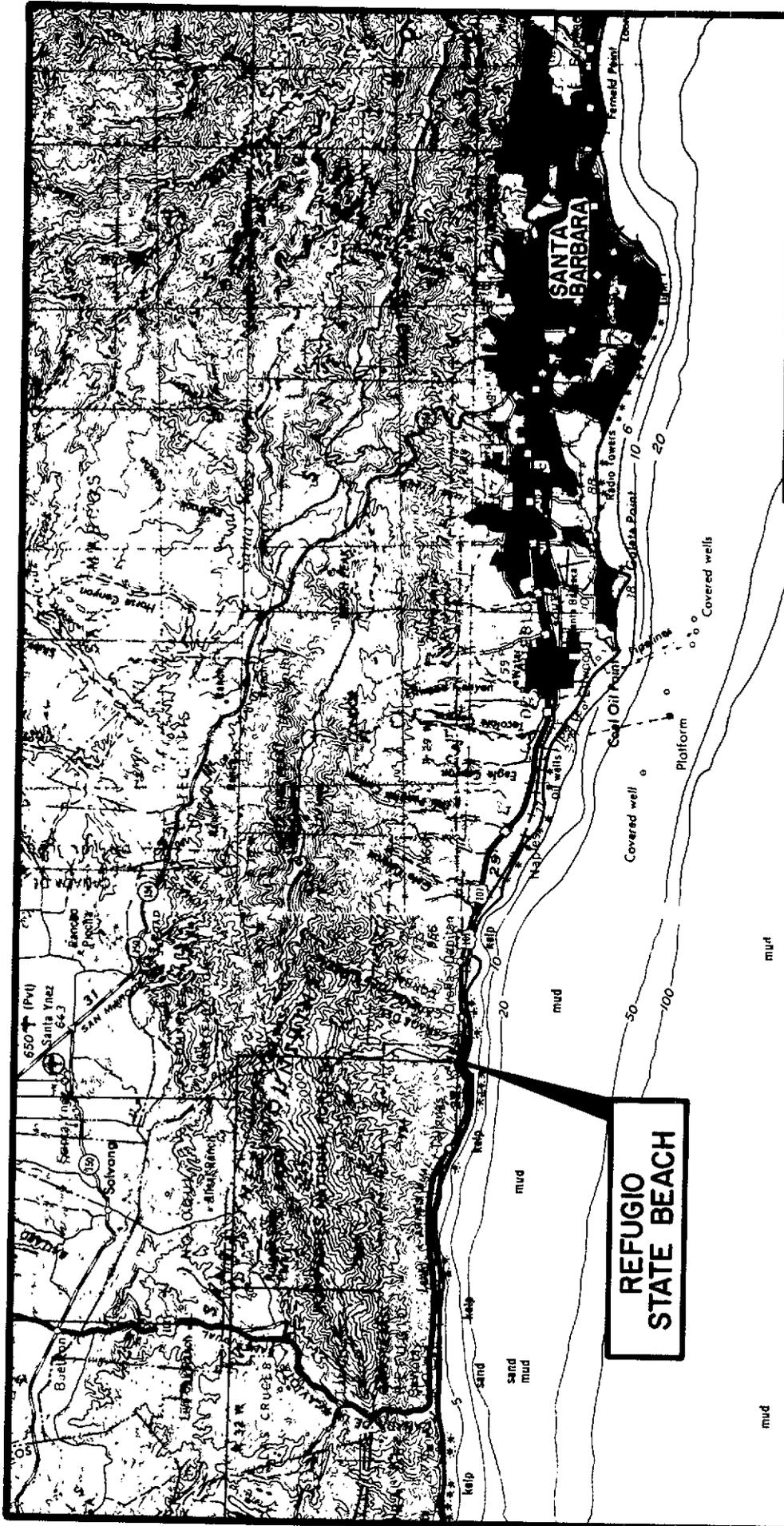
Assumptions

Proposed enhancements to the unit will attract more people. Improvement of the sewage system should eliminate the need for occasional closures for health reasons. Development of the bike trail should also bring more users to the unit. All of these factors should increase use of the concession.

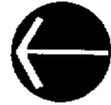
Recommendations

To provide increased service to the public, the concession operator should be encouraged to expand his services as use of the unit increases. Upon completion of the bicycle trail from Refugio State Beach to the University of California at Santa Barbara, bicycle rentals should be considered.

Appendix

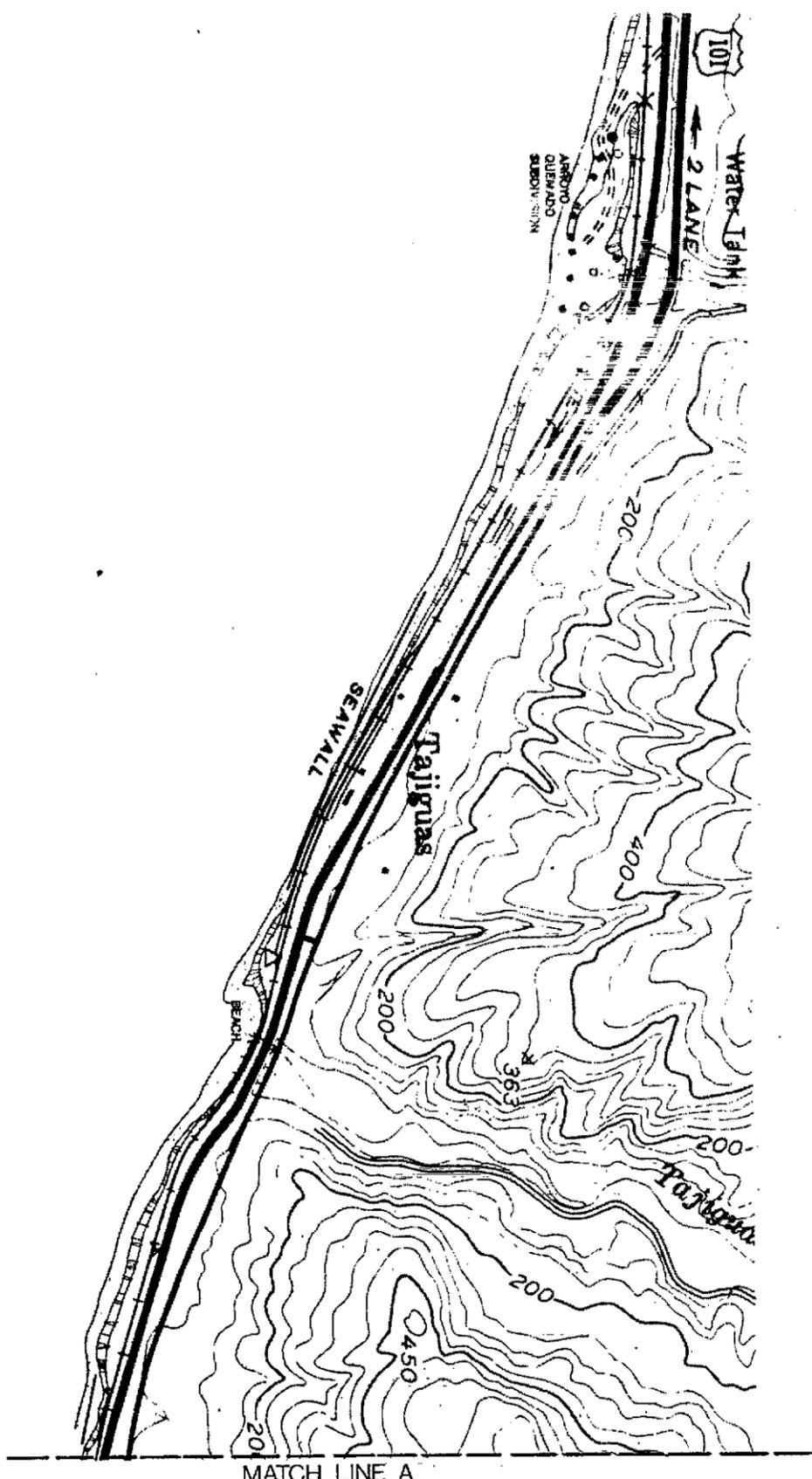
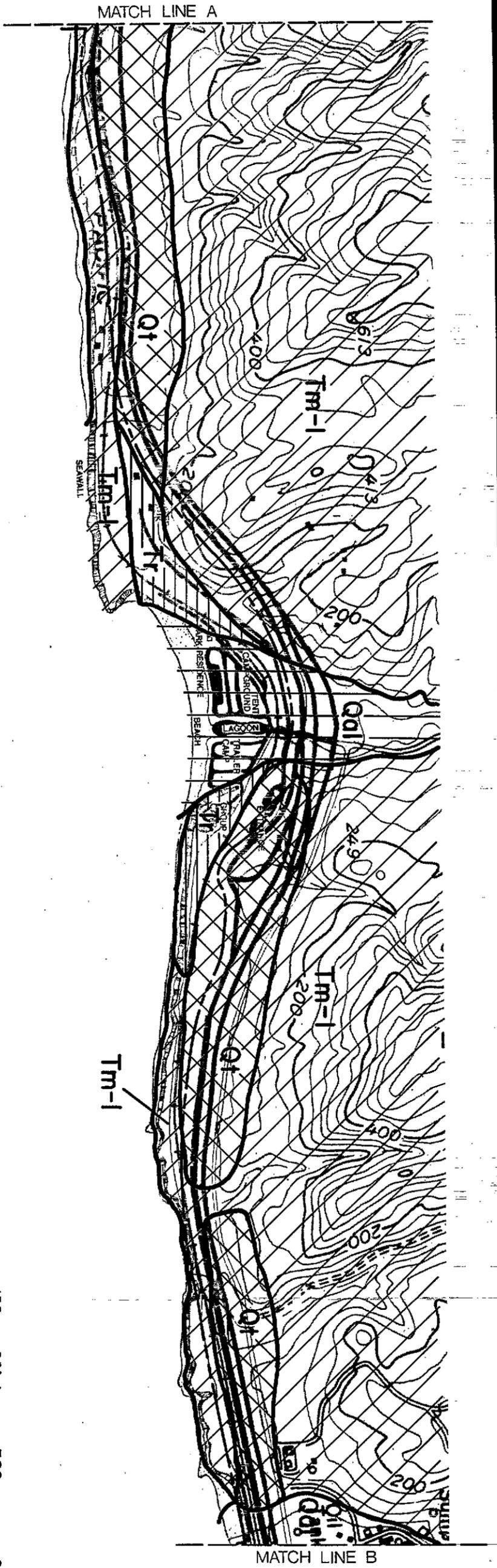


**REFUGIO
STATE BEACH**



5 0 KILOMETERS 8

**REFUGIO STATE BEACH
VICINITY MAP**

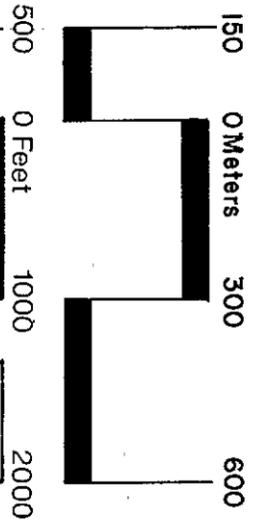


**REFUGIO STATE BEACH
GEOLOGY MAP**

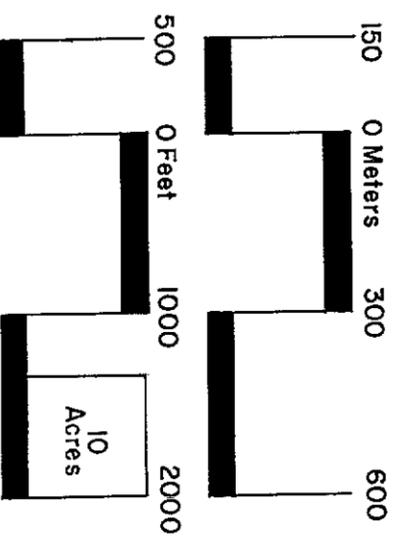
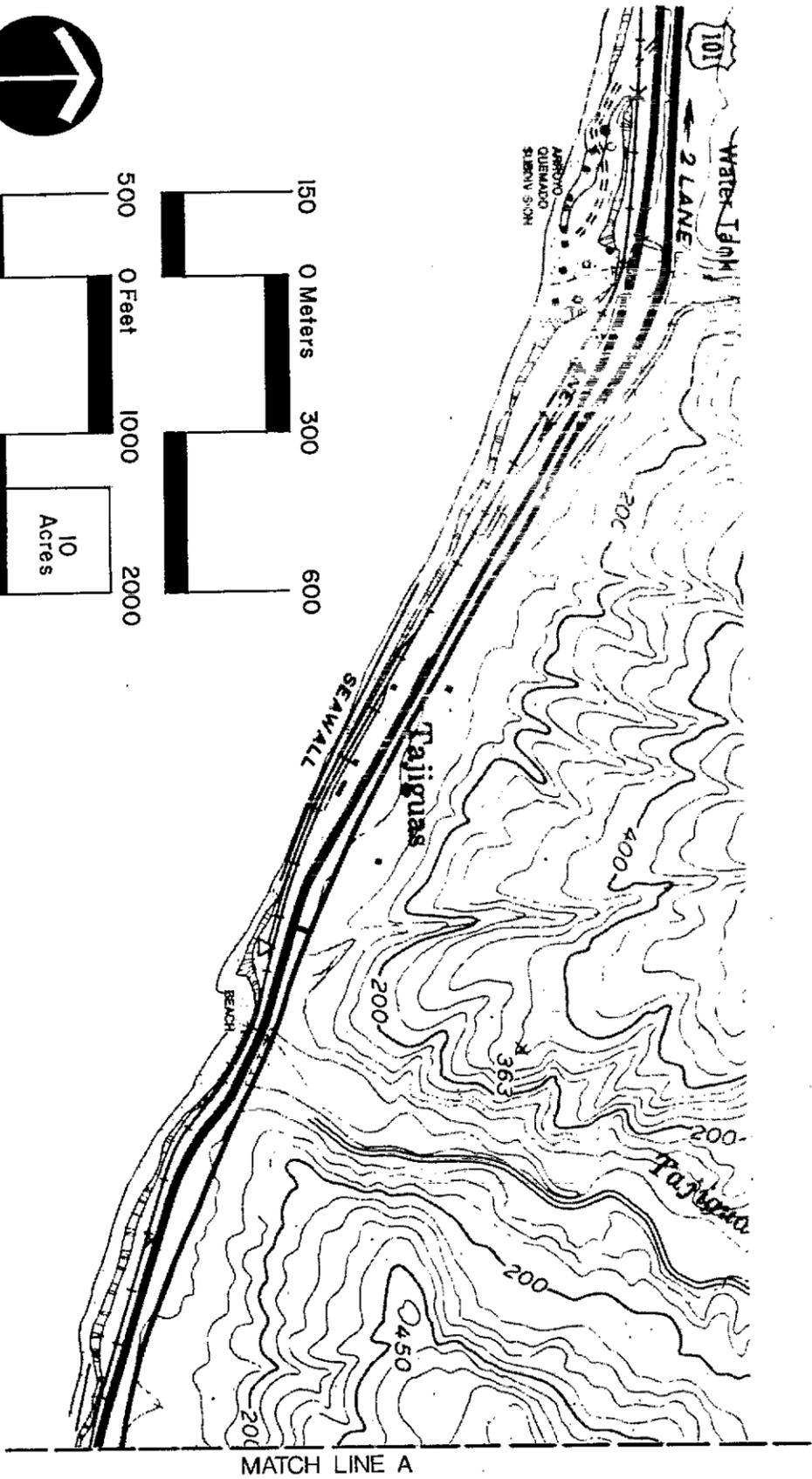
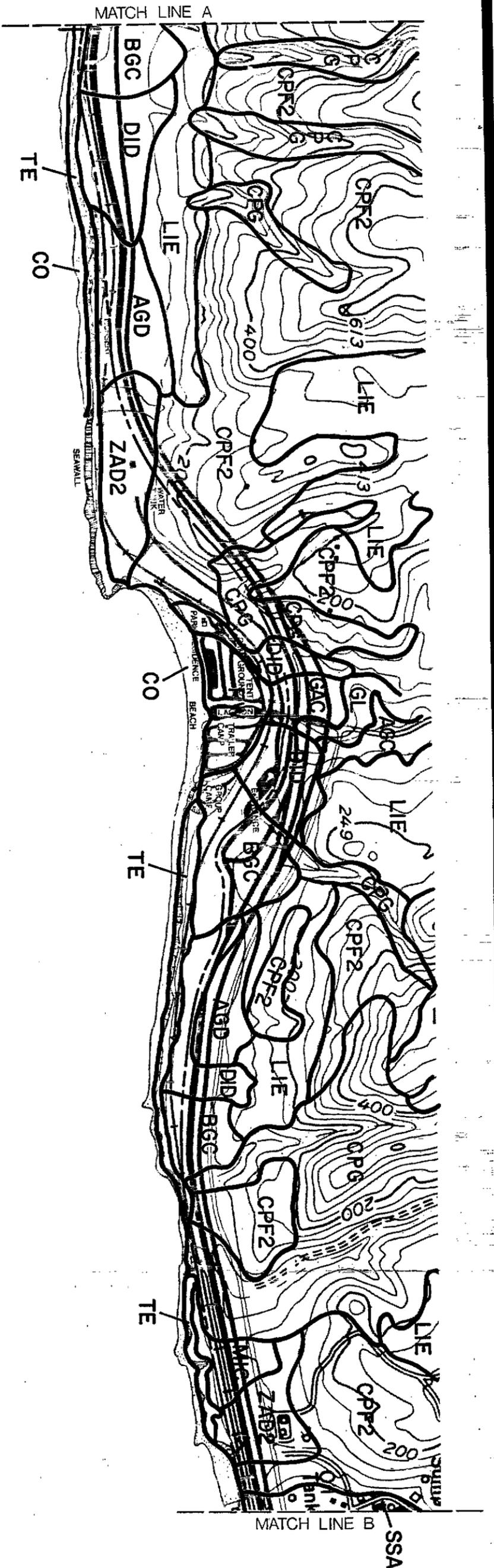
Legend

- Alluvium
- Terrace deposits
- Monterey Formation — lower
- Rincon Formation

Source: Dibblee, 1950. Original map scale 1:62,500



| REVISIONS | DATE | DESIGNED |
|-----------|------|--------------------|
| | | DRAWN AUG. 1978 |
| | | CHECKED |



Legend

REFUGIO STATE BEACH SOILS MAP

- AGC — Agueda silty clay loam, 2-9% slopes
- AGD — Agueda silty clay loam, 9-15% slopes
- FW — Aguments, fill areas
- BGC — Botella shaly clay loam, 2-9% slopes
- CPG2 — Capitan cobbly clay loam, 30-50% slopes
- CPG — Capitan Rock outcrop complex, 50-75% slopes
- CO — Beaches
- DID — Diablo clay, 9-15% slopes
- TE — Escarpments
- SSA — Goleta fine sandy loam, 0-2% slopes
- GAC — Goleta fine sandy loam, 2-9% slopes
- GL — Gullied land
- LIE — Lime clay loam, 15-30% slopes
- MIC — Millpitas-Positas fine sandy loam, 2-9% slopes
- BSG — Orphants, 50-75% slopes
- ZAD2 — Zaca clay, 9-15% slopes

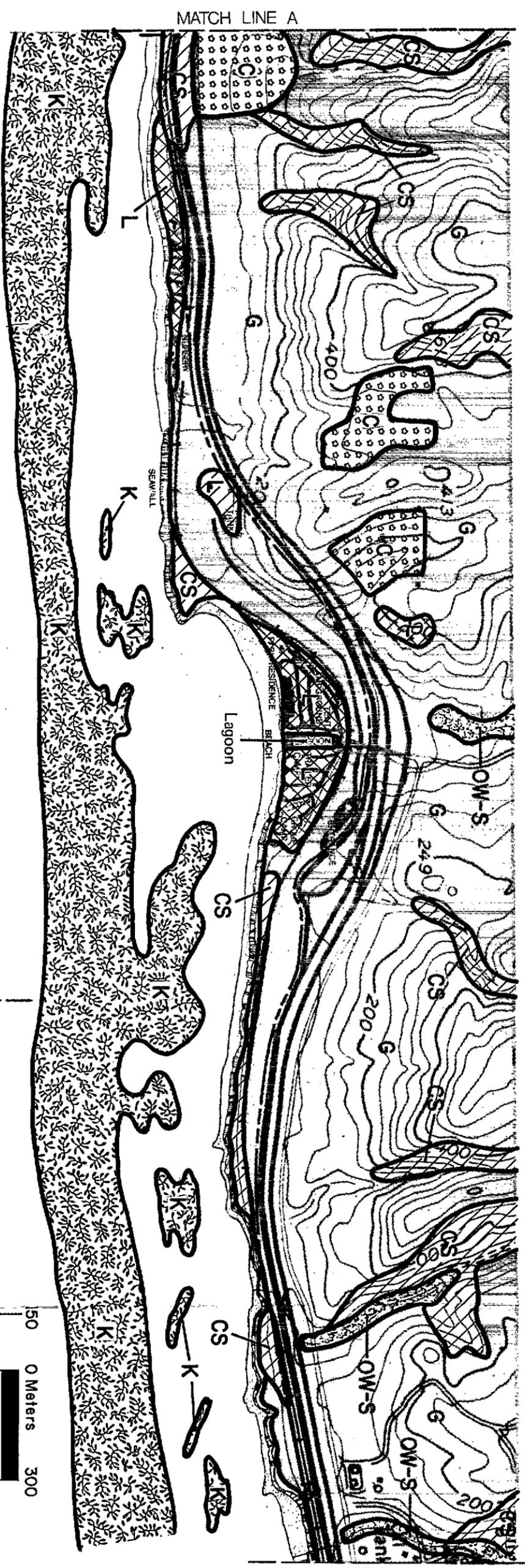
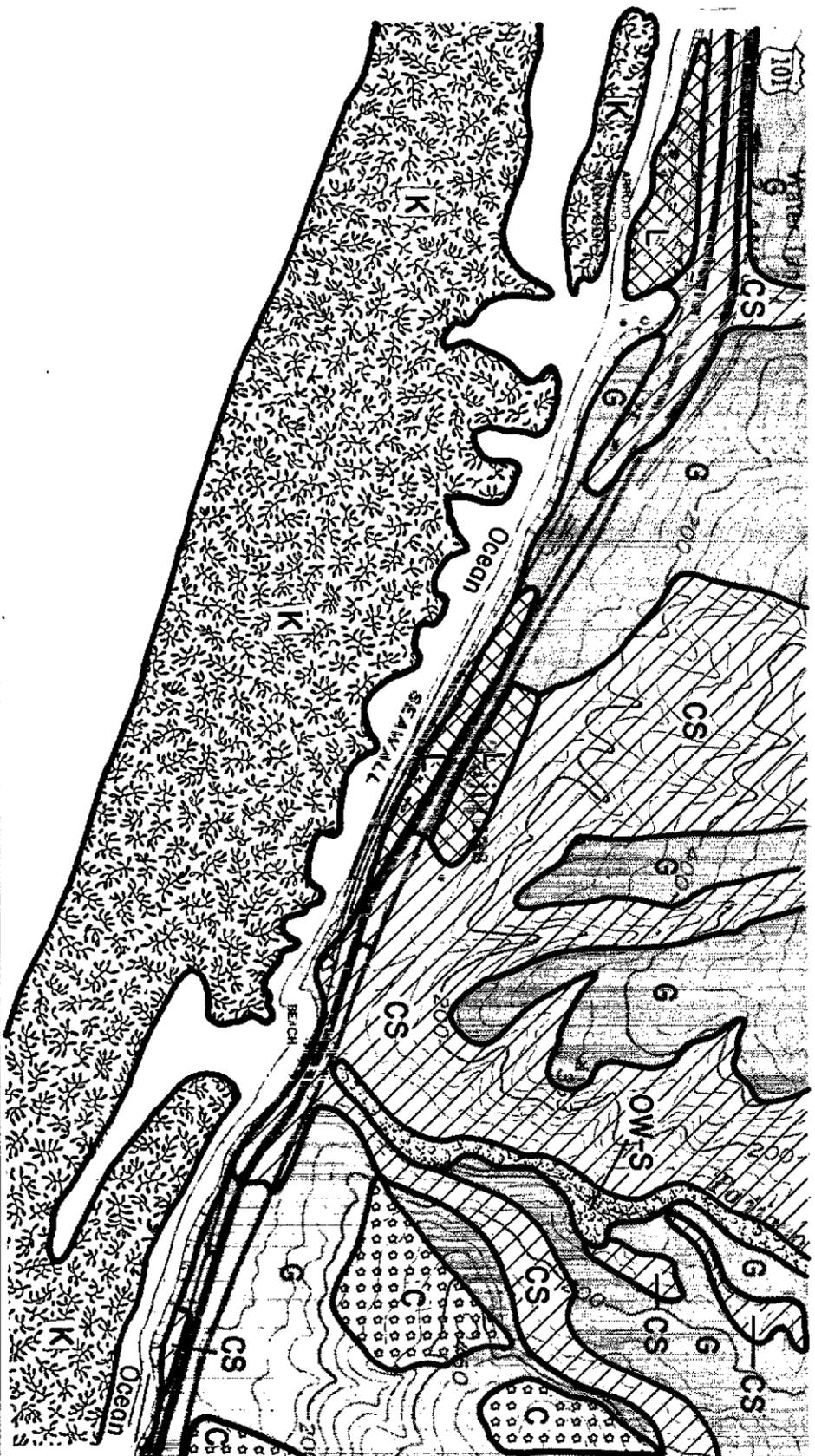
Source: Shipman, 1977. Original map scale 1:24,000



Santa Barbara/Ventura Coastal State Park System Plan
SOILS MAP
REFUGIO STATE BEACH

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION
APPROVED _____ DATE _____

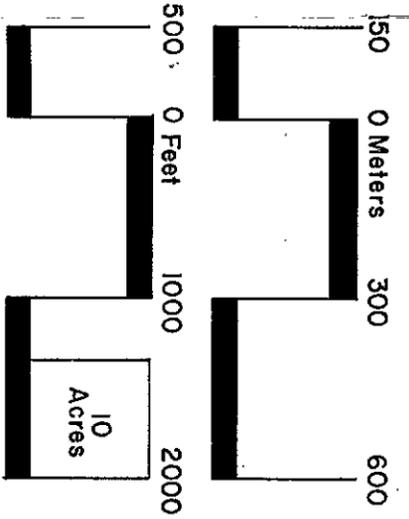
| REVISIONS | DATE | DESIGNED |
|-----------|------|--------------------|
| | | DRAWN AUG. 1978 |
| | | CHECKED |



Legend

REFUGIO STATE BEACH
VEGETATION MAP

| | |
|--|-------------------------------------|
| | Coastal Sage Scrub |
| | Grassland |
| | Cultivated lands |
| | Oak Woodland — Sycamore Association |
| | Landscaped/habitat areas |
| | Kelp beds |



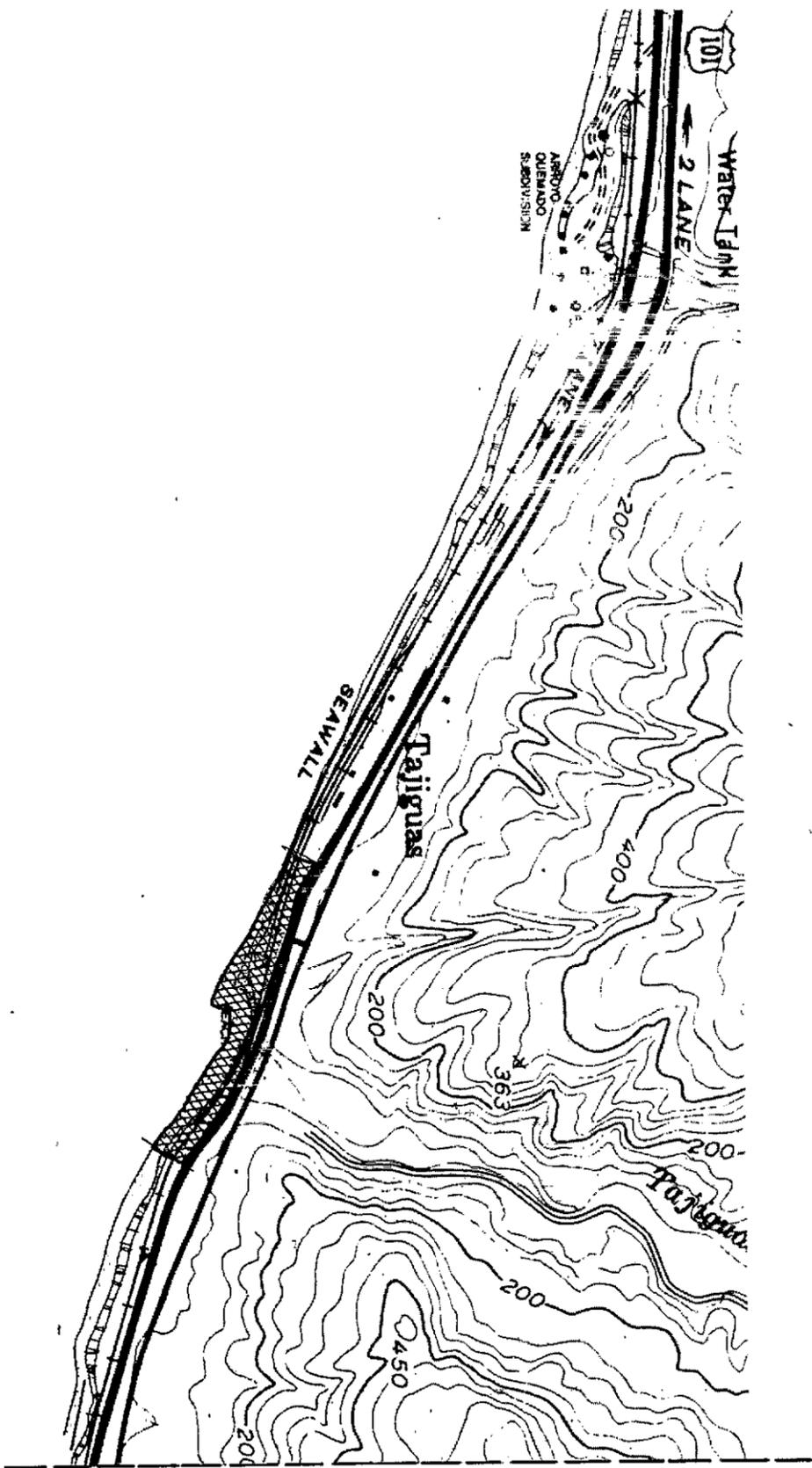
Santa Barbara/Ventura Coastal State Park System Plan
VEGETATION MAP
REFUGIO STATE BEACH

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

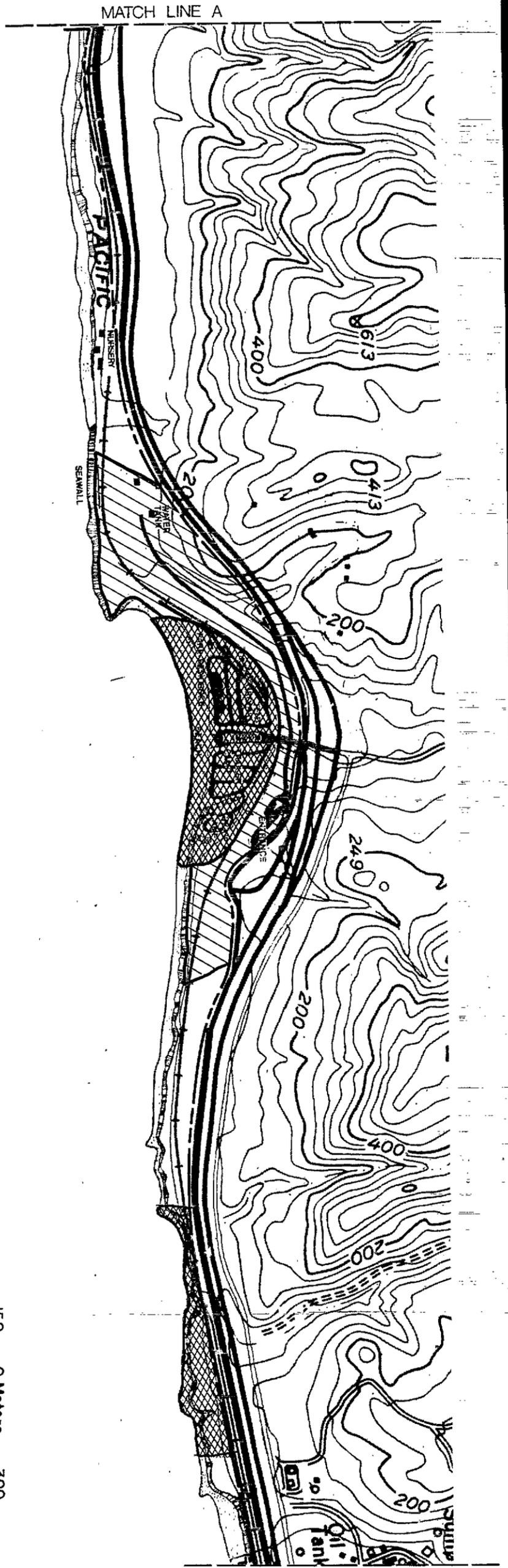
APPROVED _____ DATE _____

| REVISIONS | DATE | DESIGNED |
|-----------|------|--------------------|
| | | DRAWN AUG. 1978 |
| | | CHECKED |

4-4
SHEET NO.
OF
DRAWING NO.



MATCH LINE A



MATCH LINE B

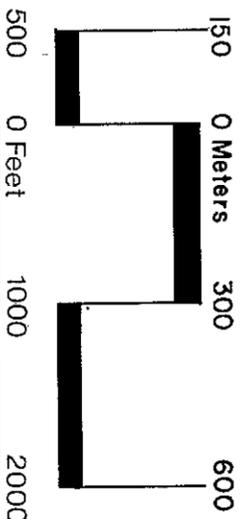
Legend

CULTURAL RESOURCES SENSITIVITY

High

Moderate

Refer to text for explanation of ratings



4-5



Santa Barbara/Ventura Coastal State Park System Plan
RESOURCE ELEMENT
 REFUGIO STATE BEACH

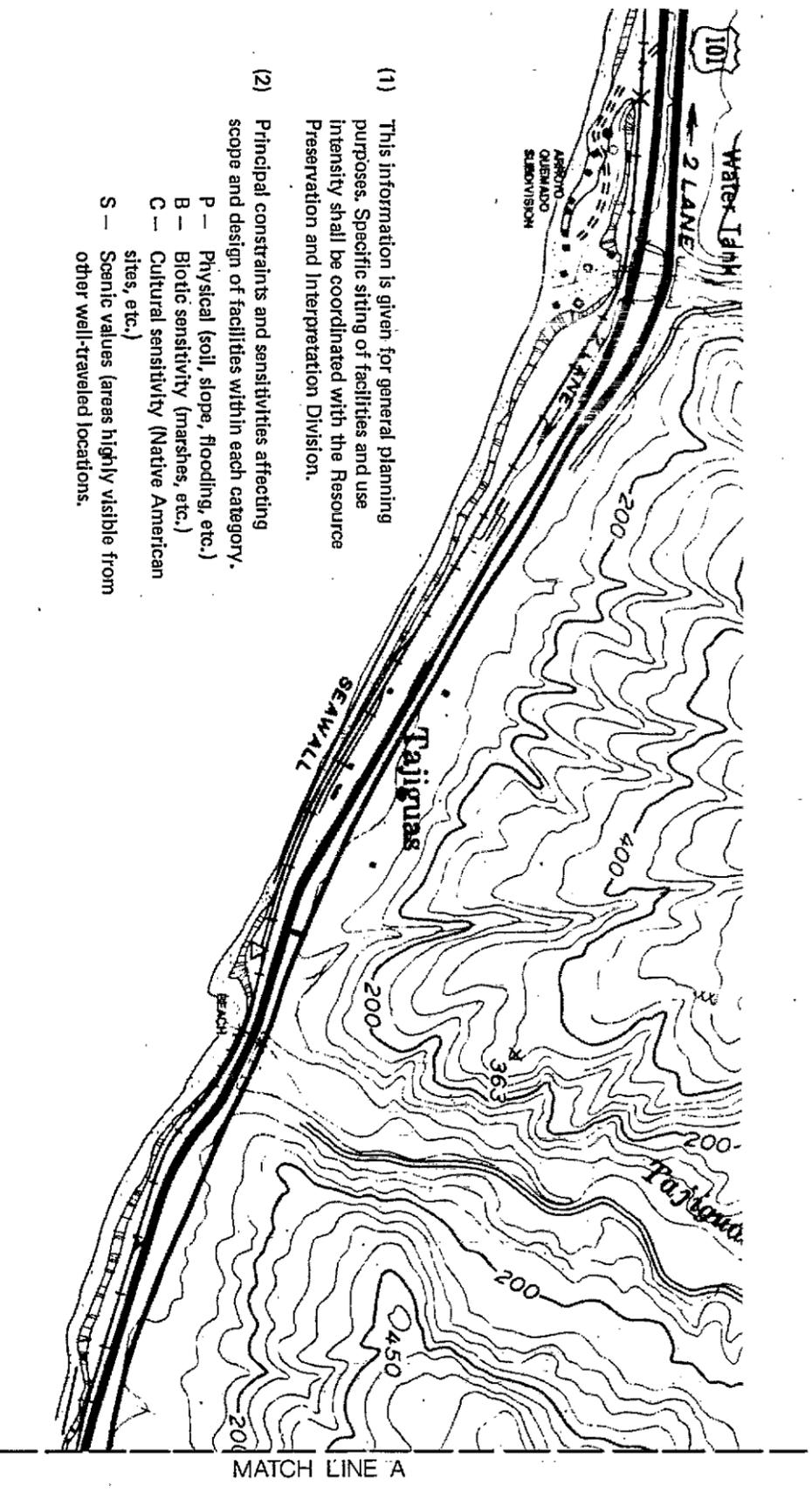
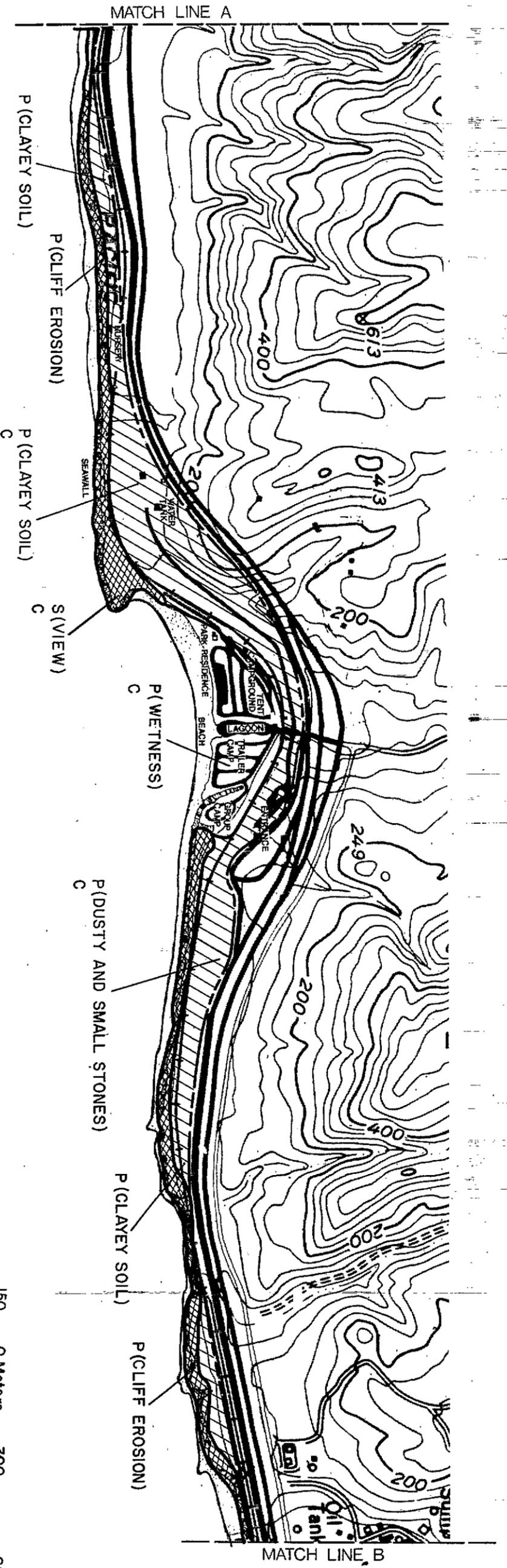
RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF PARKS AND RECREATION

APPROVED _____ DATE _____

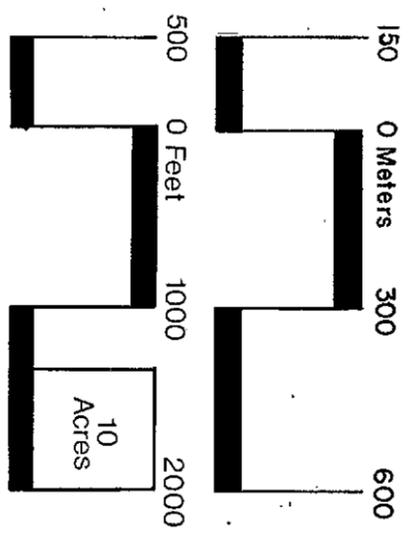
| REVISIONS | DATE | DESIGNED |
|-----------|------|----------|
| | | |
| | | |
| | | |

| |
|---------|
| DRAWN |
| CHECKED |

DRAWING NO.
 SHEET NO.
 OF



- (1) This information is given for general planning purposes. Specific siting of facilities and use intensity shall be coordinated with the Resource Preservation and Interpretation Division.
- (2) Principal constraints and sensitivities affecting scope and design of facilities within each category.
- P - Physical (soil, slope, flooding, etc.)
 - B - Biotic sensitivity (marshes, etc.)
 - C - Cultural sensitivity (Native American sites, etc.)
 - S - Scenic values (areas highly visible from other well-traveled locations).



Legend

ALLOWABLE USE INTENSITY

| Relative Intensity Of Use | Representative Facilities or Activities |
|---------------------------|---|
| High | High density camping, day-use parking, general beach activities |
| Moderate | Low density camping, walk-in camping, picnicking |
| Low | Hiking and interpretive trails, nature observation |



Santa Barbara/Ventura Coastal State Park System Plan
RESOURCE ELEMENT
 REFUGIO STATE BEACH

RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF PARKS AND RECREATION

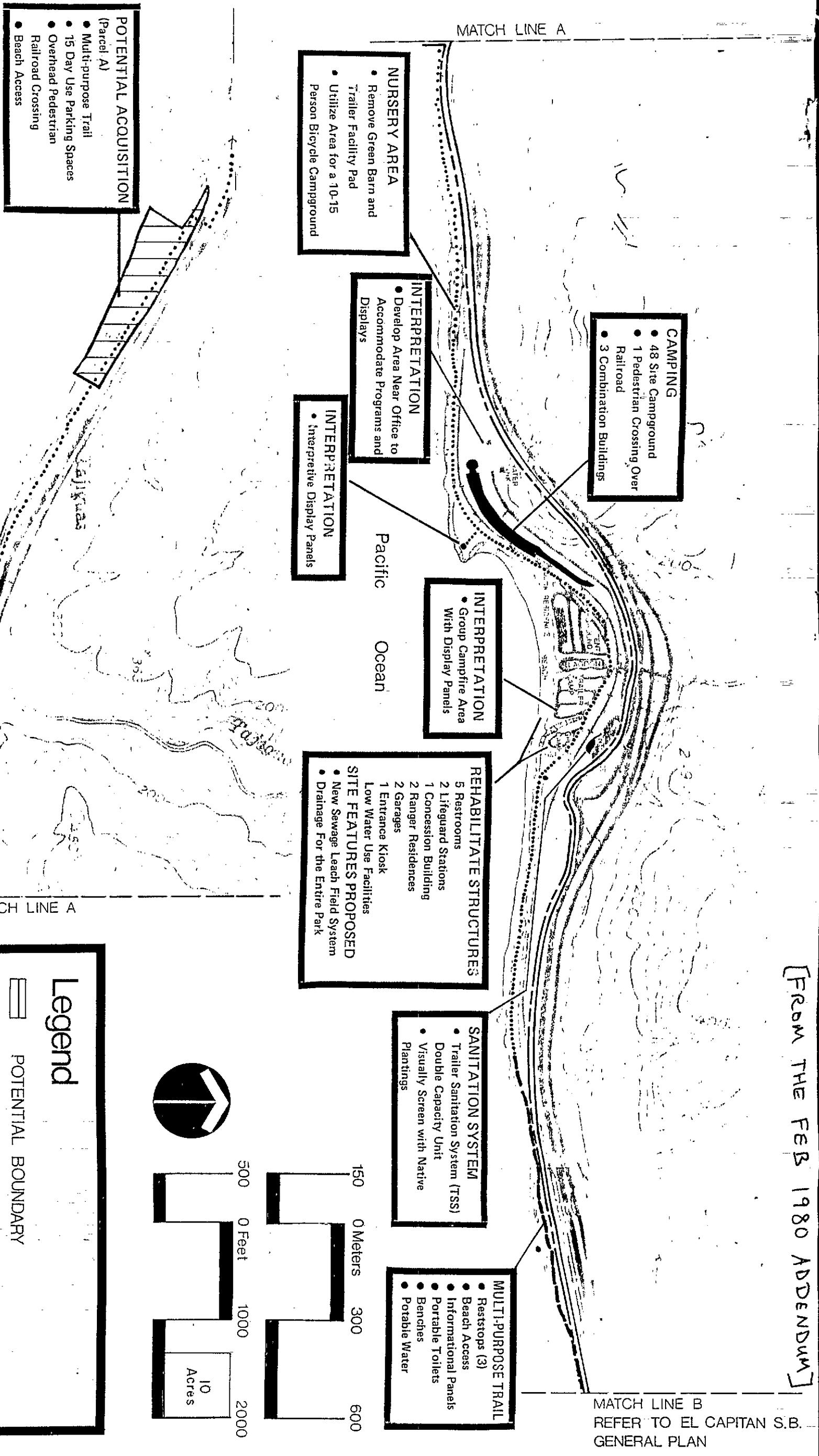
APPROVED _____ DATE _____

| REVISIONS | DATE | DESIGNED |
|-----------|------|----------|
| | | |
| | | DRAWN |
| | | CHECKED |

DRAWING NO. _____
 SHEET NO. _____
 OF _____

[From THE FEB 1980 ADDENDUM]

MATCH LINE A



MATCH LINE B
REFER TO EL CAPITAN S.B.
GENERAL PLAN

POTENTIAL ACQUISITION (Parcel A)

- Multi-purpose Trail
- 15 Day Use Parking Spaces
- Overhead Pedestrian Railroad Crossing
- Beach Access

NURSERY AREA

- Remove Green Barn and Trailer Facility Pad
- Utilize Area for a 10-15 Person Bicycle Campground

CAMPING

- 48 Site Campground
- 1 Pedestrian Crossing Over Railroad
- 3 Combination Buildings

INTERPRETATION

- Develop Area Near Office to Accommodate Programs and Displays

INTERPRETATION

- Interpretive Display Panels

INTERPRETATION

- Group Campfire Area With Display Panels

REHABILITATE STRUCTURES

- 5 Restrooms
- 2 Lifeguard Stations
- 1 Concession Building
- 2 Ranger Residences
- 2 Garages
- 1 Entrance Kiosk

Low Water Use Facilities

- New Sewage Leach Field System
- Drainage For the Entire Park

SANITATION SYSTEM

- Trailer Sanitation System (TSS)
- Double Capacity Unit
- Visually Screen with Native Plantings

MULTI-PURPOSE TRAIL

- Reststops (3)
- Beach Access
- Informational Panels
- Portable Toilets
- Benches
- Potable Water

NOTES

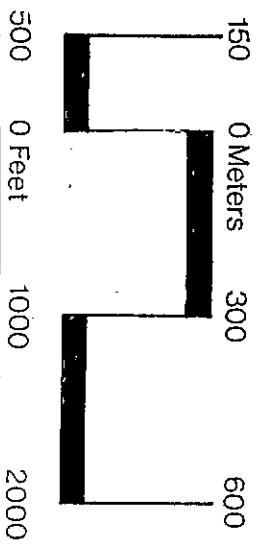
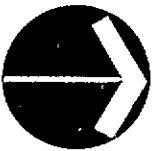
1. "Potential acquisition proposals shown here are intended for long-range planning purposes only and are not a commitment for acquisition."
2. "The provision of facilities indicated on lands not presently owned by the California Department of Parks and Recreation is contingent on State acquisition of those lands. Land uses shown represent potential opportunities based on available data. Additional investigations will be initiated if and when acquisition is completed, and alternate land uses may be indicated or necessitated by further study."

POTENTIAL ACQUISITION (Parcel B)

- Multi-purpose Trail
- 25 Day Use Parking Spaces
- At Grade Pedestrian Railroad Crossing
- Access for Tajiguas Beach

Legend

- [Solid Line] POTENTIAL BOUNDARY
- [Dashed Line] STATE BEACH BOUNDARY
- [Dotted Line] POTENTIAL ACQUISITION
- [Stippled Area] POTENTIAL and PROPOSED MULTI-PURPOSE TRAIL
- [Hatched Area] PROPOSED FACILITIES
- [Cross-hatched Area] EXISTING MULTI-PURPOSE TRAIL



Santa Barbara/Ventura Coastal State Park System Plan
**REFUGIO S.B.
GENERAL PLAN**

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

| REVISIONS | DATE | DESIGNED |
|-----------|------|----------|
| | | |
| | | |
| | | |

APPROVED _____ DATE _____

DRAWING NO. _____
SHEET NO. _____
OF _____

