

V O L U M E 1



**SUTRO HISTORIC DISTRICT**  
**Comprehensive Design**  
**and**  
**Environmental Assessment**

**NATIONAL PARK SERVICE**  
**GOLDEN GATE NATIONAL RECREATION AREA**

---

# **SUTRO HISTORIC DISTRICT Comprehensive Design and Environmental Assessment**

September 1993

Prepared for  
United States Department of the Interior  
National Park Service  
Golden Gate National Recreation Area  
San Francisco, California

Prepared by  
EDAW  
San Francisco, California

In association with  
Land and Community Associates (LCA)  
Economics Research Associates (ERA)  
DKS Associates  
BioSystems Analysis, Inc.  
Kennedy /Jenks Consultants  
Joe McBride, U.C. Berkeley

---

## CREDITS

### *United States Department of the Interior*

#### *National Park Service*

Brian O'Neill, Superintendent  
Doug Nadeau, Chief, Resource Management & Planning  
Nicholas Weeks, Project Manager, Landscape Architect  
Nancy Horner, Environmental Specialist/Park Planner  
Ric Borjes, Historical Architect  
Terri Thomas, Natural Resources Specialist/Ecologist  
Jim Milestone, Ocean District Ranger

### *EDAW, Inc.*

Cheryl Barton, Principal-in-Charge  
Allen Folks, Project Manager  
John Pelka, Environmental Coordinator  
Misty March, Landscape Architect  
Don Lee, Desktop Publishing  
Karl Miyajima, Graphic Design

### *Land & Community Associates (Cultural Landscapes/Historic Properties)*

Robert Z. Melnick, Principal  
J. Timothy Keller, Principal  
Robert M. McGinnis, Project Manager

### *Economics Research Associates (Economic Impacts)*

Steven E. Spickard, Principal Economist  
Eleanor V. Tiglao, Land Use Economist

### *DKS Associates (Traffic and Parking)*

William H. Dietrich, Principal  
Mark Spencer, Traffic Engineer

### *BioSystems Analysis, Inc. (Water Resources, Wildlife, Special Status Species, Archaeological Resources)*

Gregory Andrew, Senior Wetlands Ecologist  
Beth Adams, Wildlife Biologist  
Anne Flannery, Wildlife Biologist  
Sarah Chamberlain, Wetland Biologist  
John Holson, Archaeologist

### *Kennedy/Jenks Consultants (Civil Engineering)*

Fred C. Neal, Civil Engineer

### *Consulting Landscape Ecologists (Vegetation and Soils)*

Joe McBride  
Deborah Gerhard

---

## PREFACE

This Comprehensive Design Plan and Environmental Assessment for the Sutro Historic District has been developed within the existing context of both national legislative mandates and National Park Service management policies. The Plan is a conscious effort to address **both** natural and cultural resources, because at this site the physical attributes and biotic systems of the larger landscape contribute to its historical significance.

Virtually all cultural landscapes evolve from and are dependent on natural resources--this is the message of the Sutro site. Further, the Plan has evolved in the context of "sustainable development" which embodies the intent of fulfilling the needs of current generations without limiting the ability of future generations to procure what they need to sustain themselves. It is a concept that recognizes that human civilization is an integral part of the natural world. Central to the concept of sustainable development is the idea that decisions from initial concepts through design construction are evaluated against principles of natural and cultural resource protection.

The Adolph Sutro Historic District is located in the Ocean Beach District of the Golden Gate National Recreation Area. The GGNRA was established by Congress in 1972 with the stated purpose to "preserve for public use and enjoyment certain areas of Marin and San Francisco Counties, California, possessing outstanding natural, historic, scenic and recreational values, and to provide for the maintenance of needed recreational open space necessary to (the) urban environment."

In 1992 the National Park Service authored a Statement for Management of the GGNRA which included objectives such as the identification, preservation and enhancement of cultural landscape values, considering the dynamics of natural systems and the need to maintain species diversity; the protection and enhancement of the natural processes and biological diversity found within the GGNRA, recognizing its unique position as part of a biosphere preserve in an urban setting; the minimization of human caused or accelerated impacts and processes including erosion, invasion by alien plants, degradation of air and water quality and disruption of the natural flow of water; and the location of development in areas previously disturbed by human activity whenever possible.

Future interpretive programs will be developed to explain the role of the GGNRA in preserving our natural **and** cultural heritage. They will provide for activities that are compatible with the preservation of park resources and that promote a better understanding of these resources for public recreational

benefit and inspiration. Nature is reestablishing its presence and in its continuing process of reclamation it is regenerating a floral and faunal diversity that is rare in an urban setting.

Through the juxtaposition and interpretation of both natural and cultural resources within the Sutro Historic District the public will gain an understanding and appreciation for the interrelationship of these unique values. Further, the site will inspire respect for the complex and delicate balance of these values which is required to ensure a sustainable future on the planet. The Plan functions as a lens which focuses on the special features of the site as well as a mirror which reflects the site's relationship with the region and the world.

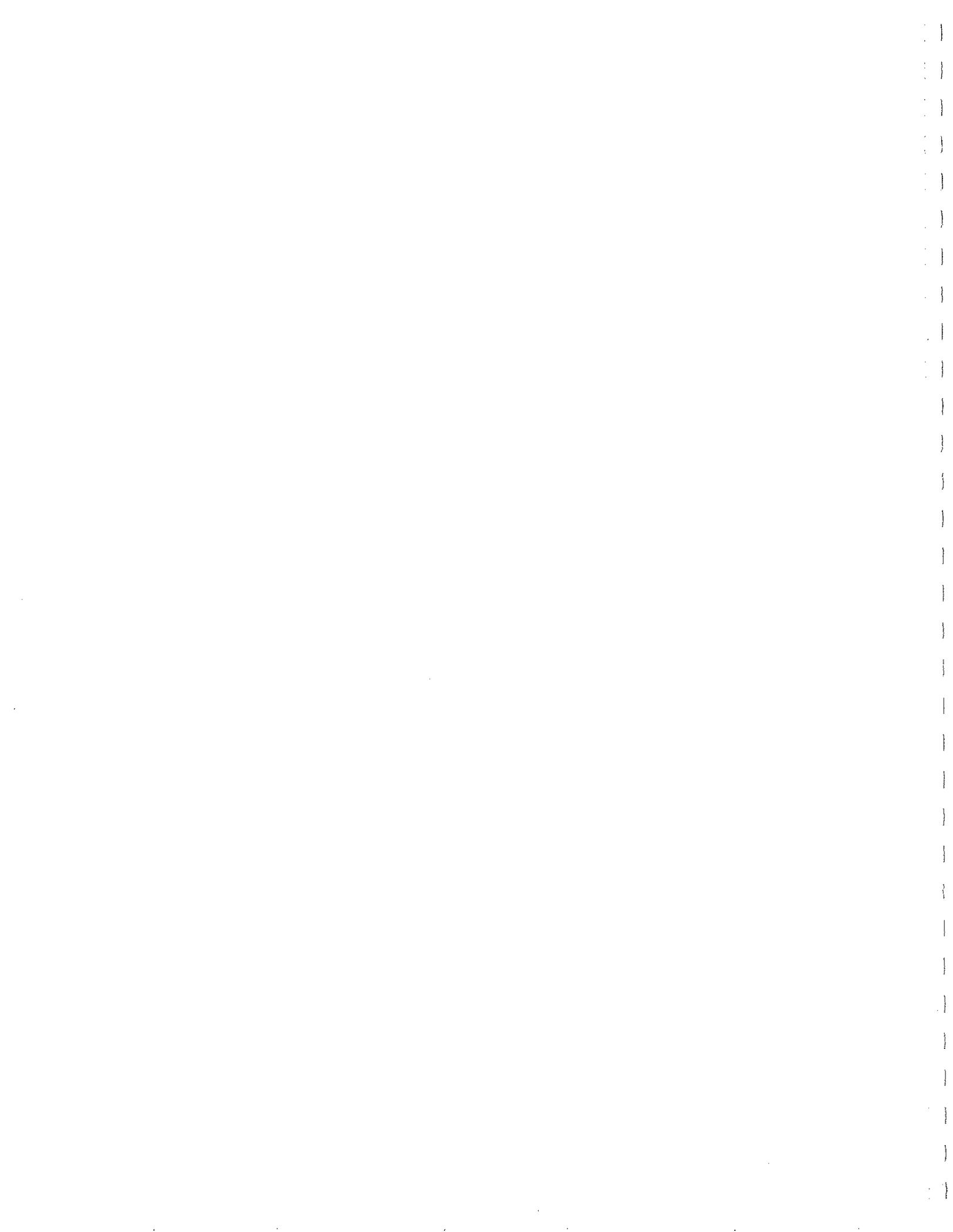
In the NPS planning process, a Comprehensive Design Plan is an intermediate step between a General Management Plan and technical documents for the actual construction of a facility. It is a "master plan" level of detail where the location of elements and their relationship on the site are described. The specific design of facilities will be accommodated in future studies with a greater level of detail in regard to form and materials as well as potential environmental impacts.

---



*"The monument, in short, is a guide to the future."*

J. B. Jackson  
*The Necessity for Ruins*



## CONTENTS

### 1 / COMPREHENSIVE DESIGN

1. Need for the Proposal .....	1-1
2. Design Proposal .....	2-1
3. Summary of Future Actions .....	3-1
4. Opportunities and Constraints .....	4-1

### 2 / ENVIRONMENTAL ASSESSMENT

5. Alternatives .....	5-1
6. Environmental Impacts of the Alternatives .....	6-1
7. Finding of No Significant Impact .....	7-1

### 3 / APPENDICES

A Plant Species Observed at the Sutro Historic District	
B Wildlife Species Potentially Occurring in the Sutro Historic District	
C Persons and Agencies Contacted, Agencies and Organizations Providing Commentary	
D References	

### 4 / LIST OF FIGURES

1-1 Existing Site Features .....	1-3
2-1 Comprehensive Design Plan .....	2-4
2-2 View from Promenade .....	2-7
2-3 Existing and Proposed Structures .....	2-13
2-4 Existing Pedestrian Circulation .....	2-16
2-5 Proposed Pedestrian Circulation .....	2-17

#### 4 / LIST OF FIGURES (CONTINUED)

2-6	View from Catwalk .....	2-19
2-7	Proposed Landscape Enhancement .....	2-22
2-8	Wetlands Enhancement .....	2-23
2-9	Memorial Relocation .....	2-25
2-10	Existing Parking .....	2-28
2-11	Proposed Parking .....	2-29
2-12	Proposed Vehicular Circulation .....	2-31
4-1	Cultural Landscape .....	4-8
4-2	Existing Circulation .....	4-11
4-3	Natural Systems Composite .....	4-14
6-1	Wetlands .....	6-2
6-2	Vegetation .....	6-7
6-3	Visual Resources .....	6-22
	Comprehensive Design Illustrative .....	Map Pocket

#### 5 / LIST OF TABLES

2-1	Existing and Proposed Parking .....	2-27
2-2	Estimate of Probable Construction Cost .....	2-34
6-1	Water Resources in the Sutro Historic District .....	6-3
6-2	Vegetation Types in the Sutro Historic District .....	6-6
6-3	Impacts on Vegetation and Soils .....	6-9

---

*1*

---

**COMPREHENSIVE DESIGN**

---



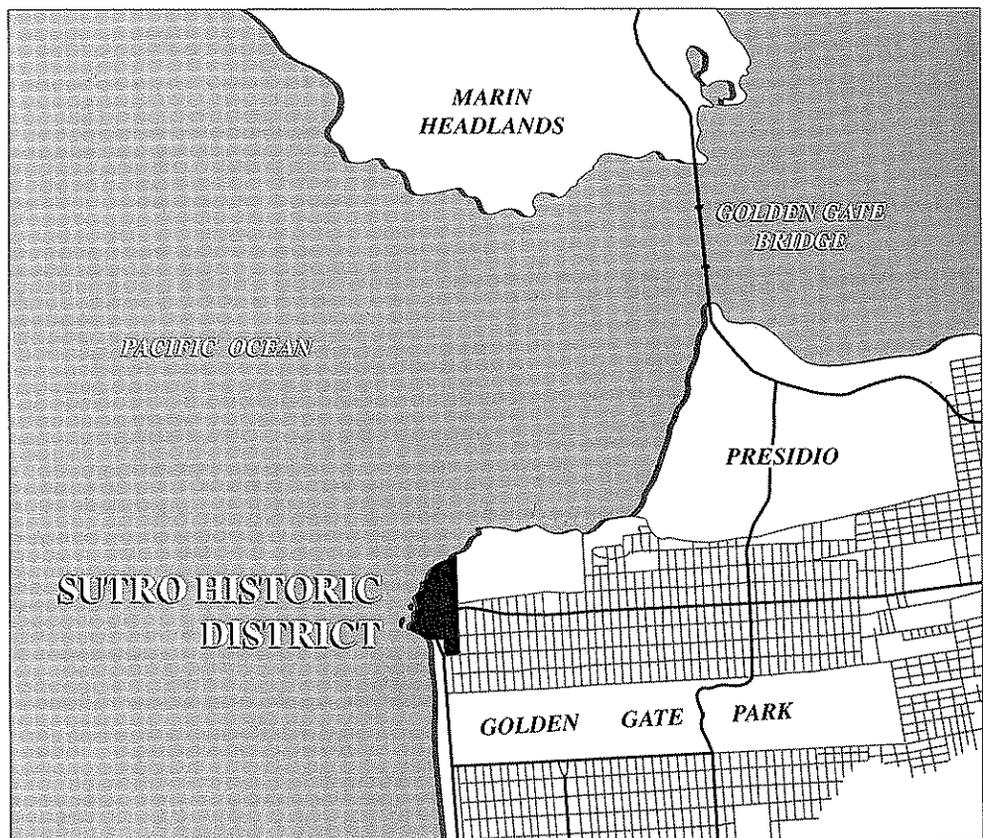
# 1. NEED FOR THE PROPOSAL

## 1.1 REGIONAL CONTEXT

The Sutro Historic District, located at the westernmost point of San Francisco, is part of the Golden Gate National Recreation Area which encompasses much of southern Marin County, central San Mateo County and spans the northern and western edges of San Francisco. It includes Baker and Ocean beaches, historic Fort Mason and Crissy Field, and will soon include the Presidio of San Francisco, 1,400 acres of extraordinary cultural and natural resources. The District is located north of Ocean Beach and south of Lincoln Park, a San Francisco City park. The western entry to Golden Gate Park is a half mile to the south, and San Francisco's Financial District is approximately seven miles to the east.

## 1.2 SITE CONTEXT

The area surrounding the Cliff House, Sutro Baths, Sutro Heights and the USS San Francisco Memorial Complex at Point Lobos is referred to as the



*Regional Context*



*Aerial View of Sutro Historic District*

Sutro Historic District (Figure 1-1). The Sutro District has been a major recreational attraction for over 100 years, since its development by civic leader Adolph Sutro in the 1880s. Its history, natural environment and spectacular ocean views are an unusual combination in an urban setting.

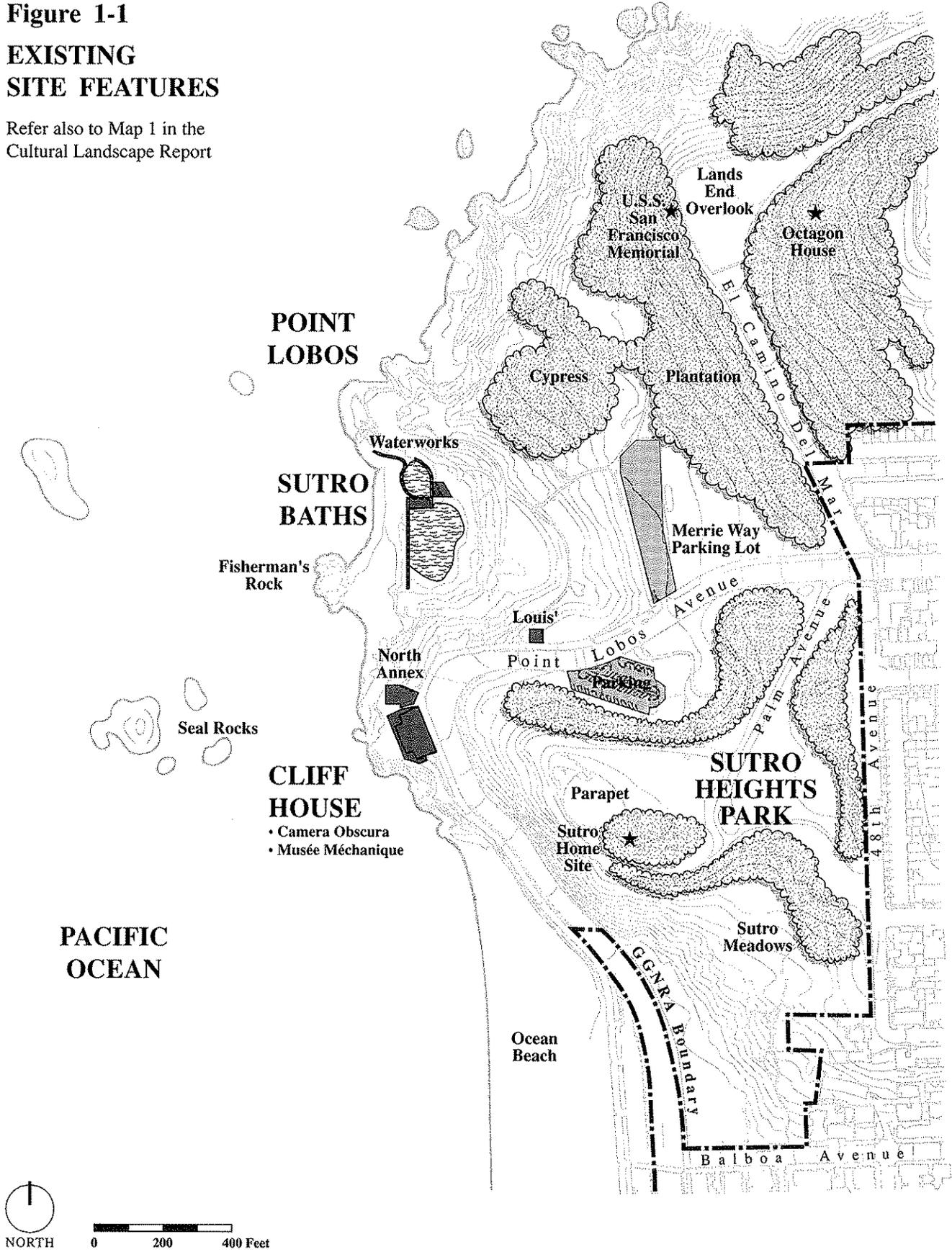
The District is bounded on the west by the Pacific Ocean, and to the east by the grid of the City which ends at 48th Avenue. Fort Miley and Lincoln Park complete the eastern and northern boundaries. The southern boundary includes the northern end of Ocean Beach and abuts the privately owned Parcel 4 north of Balboa Street.

### **1.3 EXISTING CONDITIONS AND ISSUES**

Today the District is in a deteriorated condition and does not provide the level of visitor experience that is expected at locations within the National Park system in the United States. Heavy erosion and lack of vegetative cover on the site, particularly in the area of the former Baths, create both visual blight and pedestrian safety concerns on the steep bluffs above the surf. Rubble from partially demolished structures and rusting exposed reinforcing metal create dangerous conditions for visitors as well as accelerating maintenance costs. The Cliff House and surrounding terraces, the Point Lobos overlook and the Parapet at the Heights are also severely weathered and unsafe. Although the NPS has posted warnings, deaths and other injuries due to falls from cliffs and uncontrolled access to the ruins continue to occur.

**Figure 1-1**  
**EXISTING**  
**SITE FEATURES**

Refer also to Map 1 in the  
Cultural Landscape Report



From a functional design standpoint the District has no real focus or a hierarchy of outdoor spaces. Access routes to the Baths and Sutro Heights Park are not well defined and site amenities are almost non-existent.



*Sutro Baths Entry Ruins*

Despite its deteriorated condition, the District is heavily used. Local, regional, national and international visitors are drawn to the area because of its striking panorama of the Pacific and the unusual display of wildlife seen on nearby offshore rocks. The Cliff House complex is a standard stop on the tour bus circuit, but primarily for restroom use and souvenir shopping rather than an in-depth exploration of the District. The Cliff House itself caters primarily to San Franciscans.

More than a million visitors a year travel to this commercial promontory. Conflicts between vehicles and pedestrians occur throughout the District. Tour buses cause traffic congestion along Point Lobos Avenue and create unsafe conditions for visitors in front of the Cliff House complex. Noise and exhaust from these vehicles also detract from the quality of the ocean edge experience. The location of the parking lot south of Point Lobos Avenue encourages substantial pedestrian traffic across this busy thoroughfare. Although there is a designated crosswalk, the slope and curvature of the roadway, in combination with the average speed of automobiles, limits the sight distance of drivers and creates a very unsafe condition. At the Land's End overlook, a massive expanse of unstriped asphalt functions simultaneously as roadway, parking lot and pedestrian zone; it is also quite unsightly.

The predominance of non-native vegetation and the accelerated loss of aging stands of cypress trees are key natural resource issues. Additionally, the Baths ruins have impounded fresh water from on-site springs, creating an important brackish wetland habitat for migratory waterfowl. Protecting and enhancing these resources while accommodating the large number of visitors presents a significant carrying capacity challenge for the future.

The District stirs nostalgic feelings in all who recall its past as a popular recreation place, but visitor contact and the rich interpretive potential of the site are not well developed. The NPS Visitor Center is located below street level, under the commercial complex near the Cliff House. Its presence is barely discernible amidst the visual clutter. Archaeological, cultural and natural resources of the District have not been inventoried, documented or interpreted sufficiently. The cultural and natural stories of the site are related by a few photographic panels at strategic vantage points or by informal discussions with park rangers.

#### **1.4 DESIGN PROCESS AND GOALS**

The 1980 Golden Gate NRA General Management Plan recommends the preservation and enhancement of the Sutro District's historic resources, with the surrounding landscape managed for natural values. The intent is to "rejuvenate the unsightly development and recapture the spirit of another era when San Franciscans flocked here to frolic in the water, promenade along the beach, or enjoy elegant dining made special by the sights and sounds of the Pacific."

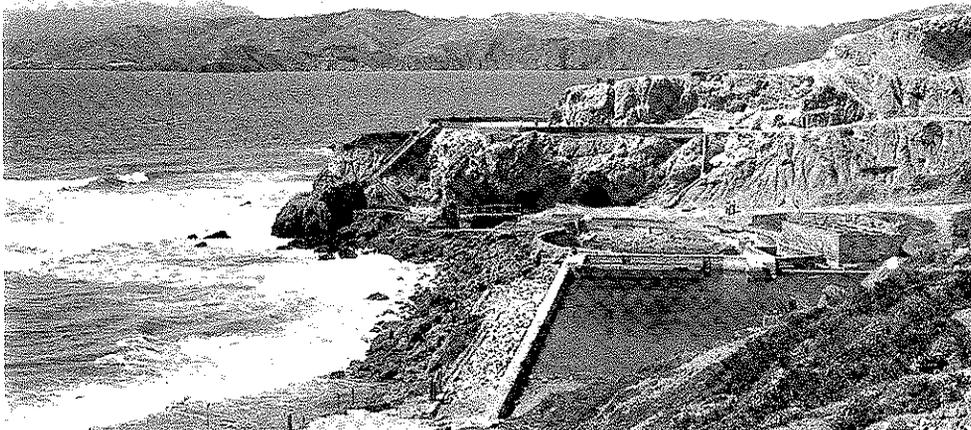
The Comprehensive Design Plan consists of three interrelated studies: (1) the Cultural Landscape Evaluation, (2) the Comprehensive Design and (3) the Environmental Assessment. The Cultural Landscape Evaluation which is a separate document, is summarized in Section 4, Opportunities and Constraints. The Comprehensive Design and the Environmental Assessment are presented herein. A third document contains the reports of the specialized consultants on the project team.

The Comprehensive Design was developed incrementally through a series of interactive workshops involving the consultant team, the public, and NPS personnel. Prior to the beginning of field work and data collection, goals were established as a point of departure to guide the planning and design process which ultimately led to the selection and development of a preferred design. Early in the process, the goals listed below were also presented in an open forum for community review and comment.

- Retain the spirit of adventure, innovation and bold design exhibited by Adolph Sutro while incorporating sustainable design appropriate to the 21st century.
- Create a presence and identity for this National Park Unit and provide a significantly enhanced visitor experience.
- Determine the significance and integrity of **both** the cultural landscape and the natural landscape and develop a “self-mitigating” design that balances, integrates, and enhances them.
- Develop a design which is well integrated with its urban context in San Francisco.

Following the goal setting workshop, site specific investigations were undertaken to analyze the cultural landscape factors, traffic and parking conditions, biotic resources, archaeologic resources, wildlife resources, infrastructure, and economic/fiscal conditions associated with the concessioners. Individual reports for each area of inquiry are on file at Park headquarters and are bound in a companion document to the Comprehensive Design Plan. They were used as input for developing the proposed design and are also summarized in Section 4, Opportunities and Constraints.

A second “imaging” workshop established a range of alternatives to pursue based upon physical, natural, cultural, and economic priorities. Beyond the notion of “no action” on the site, the ideas generated included everything from returning the District to the pre-Sutro condition of Naiad Beach to a



*Sutro Baths from the NPS Visitor Center*

complete and historically accurate reconstruction of the Baths and accompanying structures. Alternatives that fell within these two opposite extremes attempted to balance the interface between the historic and natural landscape. These alternatives were discussed at a third workshop and a preferred scheme was developed for further refinement as the Design Proposal. A “balanced” approach was determined to be the most appropriate for meeting established objectives.

The Naiad Beach Alternative, the Baths Reconstruction Alternative and the Design Proposal are the subject of the Environmental Assessment component of this document.

The Draft Design Plan and Environmental Assessment of the Sutro Historic District was completed in July 1992. The Draft Plan Document was initially distributed to the public using the Park’s mailing list, through a press release and a public presentation by the consultants before a Golden Gate National Recreation Area Citizens Advisory Commission meeting on July 30, 1992. The meeting date also initiated a formal public comment period of 30 days which was extended an additional 30 days to October 1, 1992. Interest in the project remained high throughout the fall and ultimately over 400 copies of the Draft Plan and Environmental Assessment were distributed to the public.

In order to ensure that all individuals, organizations and interested agencies had ample opportunity to comment on the project, the Park scheduled a series of 3 focused workshops after the close of the formal public comment period.

The workshops were all attended by members of the San Francisco Committee of the Park Citizens Advisory Commission, park staff and consultant team personnel responsible for the plan’s preparation. Workshops were held with the San Francisco Planning Department staff on November 17, 1992, with environmental group representatives including the Sierra Club, Audubon Society, California Native Plant Society, Urban Ecology and S.F. Tomorrow on December 5, 1992; and with representatives of neighborhoods surrounding the Sutro District on February 2, 1993. Neighborhood groups invited included Coalition to Save Ocean Beach, Friends of Sutro Park, Planning Association for the Richmond District, Sutro Neighborhood Watch, Richmond District Coalition, Richmond Community Association and the concessionaires who offer services in the Sutro District.

In addition, the consultants and the park staff presented the Draft Plan by invitation to the San Francisco Urban Research Association (SPUR) on

September 29, 1992; Planning Association for the Richmond on October 8, 1992; and the S.F. City Planning Commission on August 13, 1992.

During the formal 60-day public review period 88 letters were received—5 from governmental agencies, 6 from organizations and 78 from individuals. Fifteen (15) more written responses of a general nature were received after October 1, 1992. Almost 6000 post cards filled out by Louis' customers were hand delivered to the park during the public comment period. The San Francisco Board of Supervisors also passed a resolution on October 19, 1992, reflecting support for the restaurant. Subsequently, a petition with 425 signatures and opinion poll sheets filled out by over 300 individuals concerned with the fate of the Camera Obscura were delivered to the park in December 1992 and January 1993. Ninety (90) additional letters supporting the camera's operation were also received after the end of the public review. A list of agencies and organizations providing written commentary can be found in Appendix C.

Recommendations from this public involvement process were outlined in an NPS staff report and presented at an Advisory Commission meeting in May 1993. This plan document has been revised to reflect all recommendations.

The Comprehensive Design for the Sutro Historic District focuses on redesigning pedestrian and vehicular circulation patterns, protecting and restoring natural and cultural resource values, identifying areas of conflict, defining the scope and location of National Park Service/visitor contact, providing interpretive and support facilities, analyzing viewsheds and upgrading the quality of the visitor experience at this popular destination. The Comprehensive Design provides a basis for architectural studies and contract working drawings for priority-based site improvements to complete the revitalization of the Sutro Historic District.

## 2. DESIGN PROPOSAL

### 2.1 DESIGN EVOLUTION



*View of Baths from South*

Once an example of remarkable engineering—but rather insensitive site design—the Baths area is now a bold landform at the terminus of Geary Boulevard. The slope falls away sharply, plunging 150 feet to sea level, resulting in a sweeping ocean panorama on the approach from the east. Flanked by the headlands of Sutro Heights and Point Lobos, the elliptical form suggests a monumental amphitheater for viewing what local writer Harold Gilliam termed “ocean pyrotechnics.” It is *the* Pacific Ocean experience in San Francisco and perhaps within the Golden Gate National Recreation Area. The northern portion of the district offers a spectacular vantage point of the Golden Gate with its historic associations of economic opportunity and contemporary symbolism of the possibilities for a Pacific Rim community. The Golden Gate marks the entrance to San Francisco Bay, the confluence of 16 major California rivers and one of the world's greatest estuaries and natural harbors.

Although they are not of the stature of great ruins of the world, the concrete and steel remains of Sutro's Baths resonate with a certain intrigue. There is obviously a sense of change over time—but it is recent time as opposed to ancient time; the stuff of everyday existence as opposed to an inaccessible past. In their current condition the Baths have a special allure; an intriguing sense of lawlessness and adventure prevail. These are important characteristics in the context of urban “recreation” for body, mind and spirit.

The resiliency of natural systems is also in evidence on the site. Vegetation is reestablishing itself and reclaiming the ruins. Concrete walls and foundations have become retaining walls which impound fresh water from springs in the hillside above and create a vigorous wetland community and open water area frequented by shorebirds. The remains of the waterworks are another reminder of our interconnection with the sea as well as the technological innovations operative at the turn of the last century. This rich juxtaposition of natural and built elements poses important contemporary questions. What is the appropriate *balance*? What is to be the formal dialogue between this District and the City? What is the message of this place for the 21st century? What is the appropriate level of human intervention? What is the nature of ruins in our culture? These questions framed the more intangible or philosophical basis for the Comprehensive Design.

## 2.2 PROGRAMMATIC AND FUNCTIONAL REQUIREMENTS

The Comprehensive Design for the Sutro Historic District was driven by the need to resolve a complex set of issues. Natural systems, historic landscape fragments and recent human intervention were to be balanced to support future use and provide a quality visitor experience. Attracting *more* visitors was not considered to be a priority.

Expanding on the four major goals discussed previously, the study team identified more specific design objectives. The design for Sutro Historic District will:

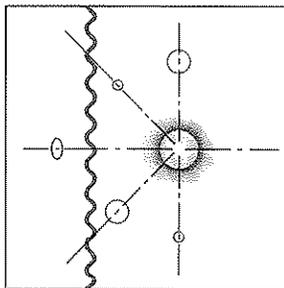
- Distinguish the site as an important component of a major National Park;
- Look to the future as well as to the past;
- Continue to celebrate recreation, adventure and fun, maintaining a diversity of uses which maximize the Pacific Ocean “edge experience”;
- Integrate significant cultural landscape features of the District as identified in the Cultural Landscape Evaluation without compromising their integrity;
- Ensure that the ruins will not be overdone with nostalgia; some elements will be rehabilitated and preserved for interpretive purposes while others will be left alone—**released**—to deteriorate; most will remain accessible to visitors;
- Provide new design elements which are distinctive as a new layer of information or meaning on the site and which will promote a deeper awareness of **both** cultural and natural resources; there will be varying levels of interpretive complexity for different users; everything will not be explained—much will be left to inspire the imagination;
- Express the human connection to elemental natural forces—wind, tides, fog; this will be made as evident to contemporary users as it was to aboriginal inhabitants of the site; where possible, these elements will provide alternative energy sources;
- Enhance the natural setting to meet the needs of the urban community for more contemplative and unstructured recreation;

- Maintain unobstructed ocean views for residents and motorists and enhance existing observation areas to maximize the “edge experience” for all visitors;
- Balance activity areas throughout the entire district to disperse visitor use;
- Provide better pedestrian access throughout the District, while diverting foot traffic from environmentally sensitive or hazardous areas; significant recreational and interpretive opportunities for handicapped individuals will also be provided;
- Resolve circulation conflicts between busses, automobiles and pedestrians; maintain and centralize current levels of parking and provide a strong linkage to the City's public transit system;
- Provide linkages to NPS and City recreational facilities and trails adjacent to the District;
- Retain the Cliff House as a food and beverage establishment; revenue generation from other concessions may be continued in other locations if it can be accomplished in a tasteful manner.

## 2.3 COMPREHENSIVE DESIGN

### *Overview*

Landscape rehabilitation is the proposed design approach; as defined by the NPS, **rehabilitation** is a process that retains the historic character of the landscape while making changes to the property for new uses and interpretation.



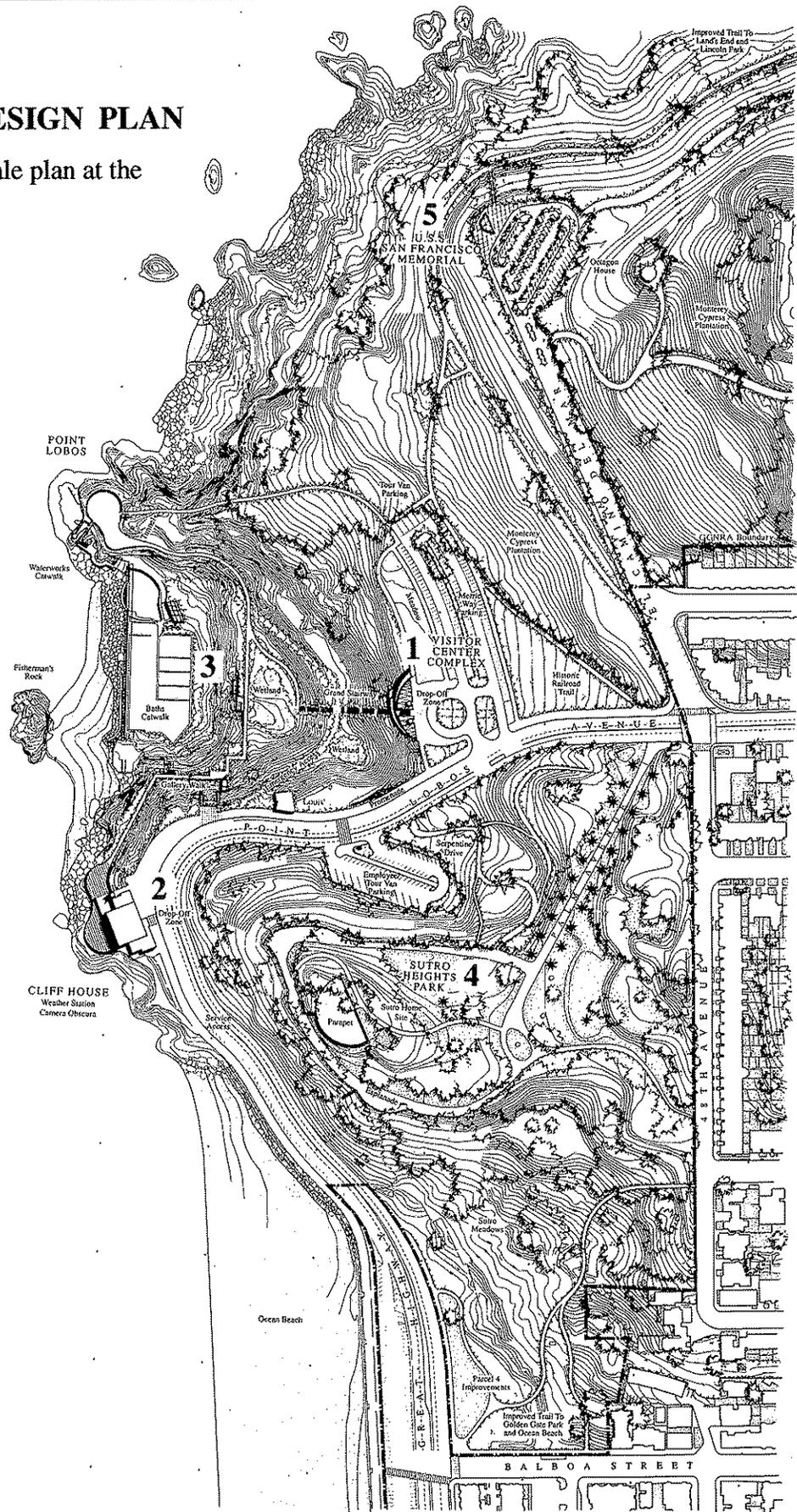
*Concept Diagram*

The Comprehensive Design strikes a balance between the natural and built environments with facilities and activity areas located primarily at the Cliff House and Merrie Way (see Figure 2-1 and the Illustrative Plan, back pocket of report). The design also ties into Sutro Heights Park and the USS San Francisco Memorial site along existing pedestrian ways. A new NPS Visitor Center Complex is envisioned on the slope below the Merrie Way parking lot. This facility will function as the primary orientation and information center for visitors, telling the history of the site's evolution, explaining recreation options within the District and the GGNRA, and providing concession and restroom facilities. Parking will be consolidated here and the lot will be terraced with the contour of the hillside to minimize its visual impact. It will also be configured to accommodate a vehicular drop-off area.

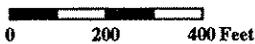
**Figure 2-1**  
**COMPREHENSIVE DESIGN PLAN**

Note: Refer also to the full scale plan at the back of this report.

1. Visitor Center Complex and Parking
2. Cliff House and Terrace Overlook
3. Baths Ruins and Wetlands
4. Sutro Heights Park
5. U.S.S. San Francisco Memorial and Overlook



NORTH



The Cliff House will be maintained as a “road house” for both residents and visitors. In keeping with the sustainable development mandate of the NPS, the structure will be rehabilitated—through alteration and repair—to accommodate contemporary use while preserving those portions or features of the original structure that are important in defining its significance (see Cultural Landscape Report). The terrace will be renovated to provide additional viewing and sitting areas as well as access to a barrier-free trail above the Baths. The assets of the Musée Mécanique will be relocated to the Visitor Center Complex and the Camera Obscura will be integrated into the Cliff House. A climate-sheltered observation area, displays of weather information and an elevator for terrace access will also be incorporated in the new Cliff House. Louis’ Restaurant will be allowed to remain for the near future without additions or alternations with the exception of ADA improvements and safety repairs. The North Annex will be removed with most facilities relocated to the Visitor Center Complex. Gift and souvenir sales will be accommodated at the Cliff House. All tour buses will be downsized and bus parking will be relocated to an employee parking lot. Six tour vans will also be accommodated in the Merrie Way Lot.

Native vegetation will be reestablished throughout the District to expand both the natural diversity and the site’s interpretive potential. The great bowl-shaped landform of the Baths area will be stabilized and revegetated and the ruins will be interpreted as a cultural landscape. A system of steps, pathways, bridges and catwalks will provide safe but dramatic pedestrian access through the ruins and to the tunnel and the Point Lobos overlook north of the site. These elements will be designed to have minimal impact on wetland habitat. The “waterworks” will be reactivated to the extent possible to inform and entertain visitors during high tide events.

Sutro Heights will continue to function as a neighborhood park because major visitor uses will be centered at the Visitor Center Complex and the Cliff House. A portion of the historic Ferries and Cliff House Railroad alignment will become a pedestrianway from the Visitor Center to the corner of 48th Avenue and Point Lobos Avenue, linking to Palm Avenue, the historic entrance to the Heights. Pedestrian circulation will be reestablished, along the historic path network, to the site of the Sutro home and beyond to the Parapet and Esplanade. The historic gardens flanking Palm Avenue will be restored to give a sense of what the heights were like when Sutro resided there.

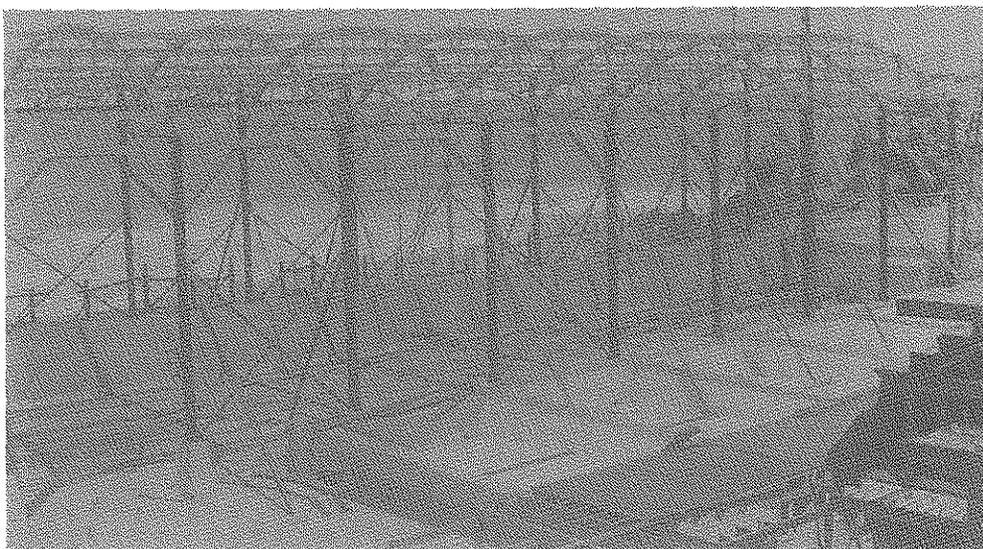
The historic Cypress plantation north of the Visitor Center Complex will be managed to establish a healthy forest canopy. The historic railroad alignment will continue to be used as a pedestrian path to the Land’s End overlook

where the USS San Francisco Memorial will be relocated and landscaped to give it a more ceremonial presence. Parking in this area will be redesigned to eliminate the vast expanse of asphalt which now exists. Trails from this area to the north and Sutro Heights to the south will tie into the coastal trail network now under development within the GGNRA.

### *Visitor Center Complex*

This structure will be a contemporary design which demonstrates the concept of sustainable architecture and is expressive of the site's geology and technological present. Built of the materials of the earlier structure—glass, steel and concrete, the two-level building will sit lightly on the hillside below the Merrie Way parking area. A partially earth-sheltered building is implied, with different levels suggesting the shifting movement of the geologic strata of the site. A glazed truss-supported roof will fill the upper level with natural light evoking the atmosphere of the original bath house.

A Grand Stairway will puncture the building, providing an axial connection between the parking area and the lower Baths as well as access to an upper observation deck and the building interior (Figure 2-2). The Stairway will be carefully designed and constructed so that it does not adversely impact the existing wetland habitat. Concrete rubble available from onsite demolition or other District locations could be recycled in the construction of this stairway to emulate the character of existing materials on this site and to make an interpretive statement about recycling. An elevator will provide easy access to the facility and observation decks for the physically challenged. A weather station here, if it is not feasible at the Cliff House, would be an active re-



*Sutro Baths Structural System (Historic Photo)*



Figure 2-2  
VIEW FROM PROMENADE



minder of the available natural energy of the site and the base of an interactive interpretive program. Wind generators, tide turbines and solar collectors will harness this energy to power the building's systems. The building will also be designed to take advantage of natural ventilation with operable windows and roof louvers.

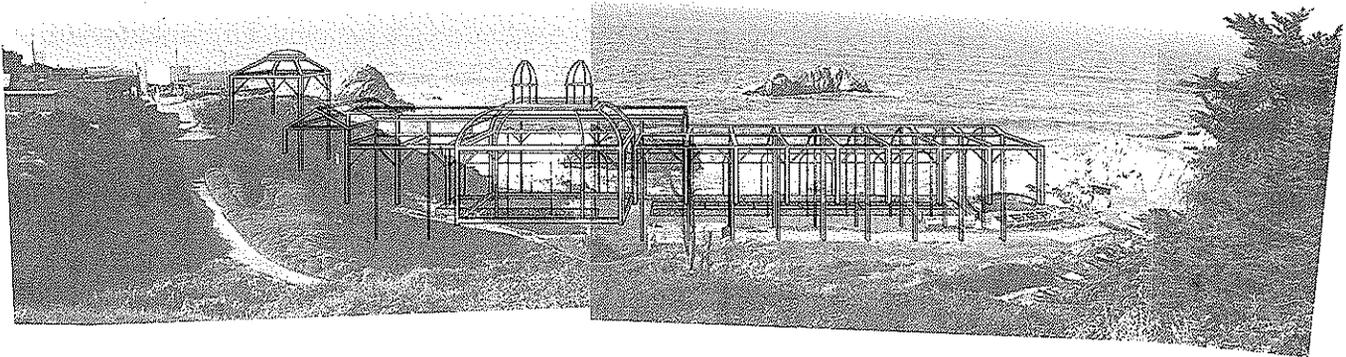
A nine thousand square foot building complex is envisioned to accommodate several functions. A new National Park Service Visitor Center will provide an image and presence for the National Park in this area and information about the natural and cultural history of the District, as well as other special areas within the Golden Gate National Recreation Area and San Francisco. Both open and enclosed viewing platforms will cantilever over the slope to the west. An NPS store offering books and other high quality merchandise will also be a desirable use. Office, storage space and public restrooms will be incorporated in this part of the complex.

Also within the complex a historical Museum of Urban Amusements will occupy an area separate from the Visitor Center. This facility would preserve and interpret the commercial recreational and educational aspects of the site's history including the Sutro Baths and Playland. The contents of the Musée Mécanique will be relocated here and displayed in a more spacious and, ideally, highly interactive and even noisy environment, reminiscent of the site's origins. A small cafe will also support the complex.

Approximate square footage requirements of the new Visitor Center complex are as follows:

Main Display Area	2,500 sq. ft.
Interpretive Program Area	1,000 sq. ft.
Park Store	1,000 sq. ft.
Museum (includes Musée Mécanique)	3,000 sq. ft.
Cafe	500 sq. ft.
Restrooms	<u>1,000 sq. ft.</u>
Total	9,000 sq. ft.

Outdoor seating areas will provide an important supportive role to the interpretive programs. The Grand Stairway below the building complex would broaden in several areas to provide informal seating for organized events such as ranger talks or wildlife observation. Access to this area for handicapped persons will be available via the service road from Point Lobos Avenue.



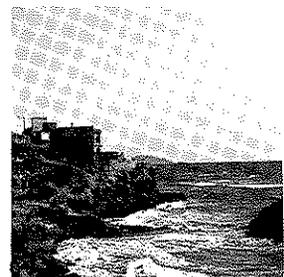
*Ghost Structure (Photo Montage)*

### ***Ghost Structure of the Baths***

In the spirit of applying the technology of the 21st century to the future design of the site (much as Adolph Sutro applied 20th century technology in his day), a laser image “reconstruction” of the baths is proposed. Such an event would commemorate and interpret the extraordinary engineering of the baths while leaving the site completely intact. The intent is that this “reconstruction” would occur sporadically, and only when site weather conditions are appropriate. It would not be widely publicized; as with the aboriginal inhabitants of the area, potential spectators would be encouraged to develop a more specific knowledge of the elemental forces at work on the site—specifically wind and fog. Laser equipment contained in a small projection booth within the Visitor Center would project a computer-generated image toward the west. This full scale image would have the interpretive potential of “ghost structures” used in other National Park facilities. They could be wire frame “drawings” of the Baths structures and water works possibly in combination with still photographs; they would be visible only if reflected from the fog. Visitors would view the event from either the Visitor Center deck or from the Grand Stairway seating area.

### ***Cliff House***

The present Cliff House is the third structure to carry that famous name. It has been extensively altered since it was built in 1909 by Adolph Sutro's daughter Emma Merritt. A three-story reinforced concrete building constructed in the neoclassical style which flourished from 1900 to 1920 in North America, it was a reaction to the excesses of the Victorian era. Concrete was the material of choice because of the need to provide a structure which could withstand earthquakes and fire.



*Cliff House and Annex*

The 1909 structure has had a series of additions and modifications since its early days. It is generally agreed that its present appearance detracts from the beauty of the site and the potential of the magnificent view. A **rehabilitation** will improve the utility or function of this cultural landscape element through repair or alteration, to make possible an efficient contemporary use while preserving those portions or features that are important in defining its historic significance.

The National Park Service has recently adopted the policy inherent in the emergency United Nations initiative on sustainable development. It is a concept that recognizes that human civilization is an integral part of the natural world. The concept further holds that future technologies must function primarily within bioregional patterns and scales. Sustainable development implies using only those resources that can be renewed and employing recycled materials where possible. Recycling buildings conserves energy. The Cliff House will be a local demonstration of sustainable architectural principles. This assumes an architecture that can be compelling and inspiring as well as sparing of resources.

The Comprehensive Design Plan is a framework for a district, a 100-acre cultural and natural landscape. Its intent is the enhancement of a place rather than of a particular building within that district. Detailed architectural programming, design, engineering and cost analyses will be undertaken by the NPS as a next step in determining the rehabilitation potential of the Cliff House. It will require an inspired architectural approach to commemorate relevant elements of the past, accommodate present needs and put forth a statement for a sustainable future.

The Cliff House will be upgraded to meet present accessibility standards and provide a new service access. Storage and receiving spaces will be located internally so that those functions can be removed from the restaurant's front door. The existing driveway ramp south of the building will be adapted for service access and a new drop off area will be designed to create a more distinctive entrance to the restaurant and simplify vehicular circulation. In addition, an elevator tower and the Camera Obscura are now envisioned as special components of the Cliff House of the future. These elements must be added while maintaining the building's historic character as well as the ongoing concession operation which is important for the economic vitality of the GGNRA. In 1978, Public Law 95-625 was enacted providing that "in the administration of those parcels known as...the Cliff House Properties and Louis' Restaurant, the Secretary shall credit any proceeds from the rental of

space in the aforementioned properties to the appropriation...bearing the cost of their administration, maintenance, repair and related expenses..."

The intent of this Plan is to enhance the site so that it is more enjoyable for the million plus visitors who already frequent it. This argues against any development that will destroy the resource which visitors and residents come to see. It also argues against the development of a building as an attraction in and of itself. The Plan does, however, assume a world class rehabilitation of the Cliff House in the playful spirit of its creator.

### *North Annex*

The North Annex building which houses the NPS interpretive facility, restrooms and commercial establishments will be removed. Most of these service functions will be replaced by the Visitor Center Complex (Figure 2-3). Others will be incorporated into the rehabilitated Cliff House. The terrace below the Cliff House will be upgraded with new stone retaining walls (or balustrades) and paving and will be expanded northward onto the level area created by building demolition. Significant occurrences in the history of the District might be commemorated with notations in the paving as well as interpretive signs. A broad stairway with cascading planters will connect the terrace with the street level. This will provide a diversity of vantage points as well as informal seating for ocean viewing or ranger talks.

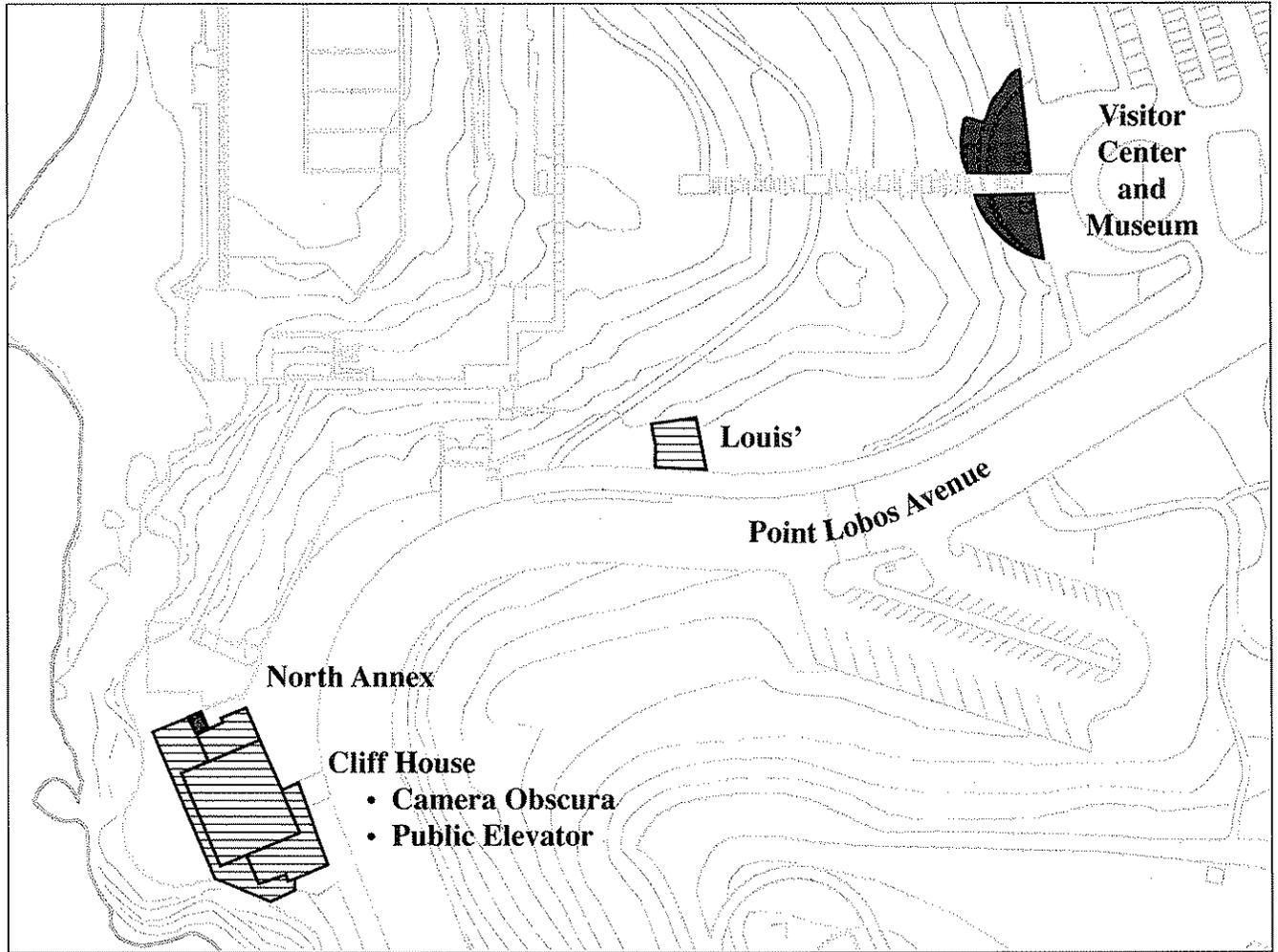
### *Weather Station*

The process of weather being recorded will be demonstrated at the Visitor Center with computerized displays charting such things as wind velocity and direction, tidal movements, off-shore storm systems and water temperature. Interactive displays will link this station with others throughout the Golden Gate National Recreation Area or along the entire west coast for up-to-the-minute comparisons on weather patterns. Through an electronic link-up, current information could be displayed in any number of other locations: the Cliff House lobby, the Camera Obscura ante chamber, or possibly in the public elevator structure. Weather instruments might also be located atop the elevator structure at the Cliff House if they were a well integrated and visually unobtrusive design element.

### *Camera Obscura*

The Camera Obscura will remain operational; the optics of the Camera would permit its incorporation internal to the Cliff House with the lens on the roof and the screening room in the area of the building now occupied by the Musée Mécanique, accessible from the terrace. This would provide an extraordinary 360 degree view even more spectacular than the view now available. If architecturally appropriate, references to the existing structure could be incorporated. If this proposal to internalize the Camera Obscura

**Figure 2-3**  
**EXISTING & PROPOSED STRUCTURES**



-  Existing Structure to Remain
-  Existing Structure to be Removed
-  Proposed Structure



becomes impossible to implement, the facility will remain in its present location.

### ***The Promenade***

The sidewalk connecting the Cliff House and the Visitor Center Complex will be redesigned as a pedestrian Promenade. Bus parking will be removed from the street, but automobile parking will continue. Where possible the sidewalk will be widened, providing space to separate people from automobiles. An open balustrade will edge the sidewalk along its northern length, providing a more transparent barrier and enhancing the visual connection to the Baths ruins. The historic entrance to the Baths will be commemorated with a small plaza overlook notched into the balustrade.

The City of San Francisco currently owns the sidewalk, and has management authority over regulating its uses. Sidewalk vendors may indeed have a role in the use of the site, and could provide additional food and beverage options as well as souvenir items as a convenience to visitors. However, the type of merchandise and presentation of vendors should be of a relatively high quality, and the Park Service will work with the City Parks and Recreation Department to encourage this.

### ***The Baths***

The following is an anonymous "Public Service Announcement" painted on a wall of the Baths ruins:

*It may be helpful to remember that things have not always been as they are; this may be obvious as it sounds, easy to forget while walking concrete paths and perceiving streams of traffic and rectangular shelters.*

*It may be helpful to keep in mind that at one time these constructions were non-existent.*

*It may be of some use to look over all that you can see right now, the expanse and boundaries of your environment and think how all of this will be gone one day...eaten and reapplied.*

*It may be helpful to see beauty in decomposition; because—like the leaves of trees turn brite (sic) and fall to the ground to replenish their mother, it is also our inescapable privilege to rot.*

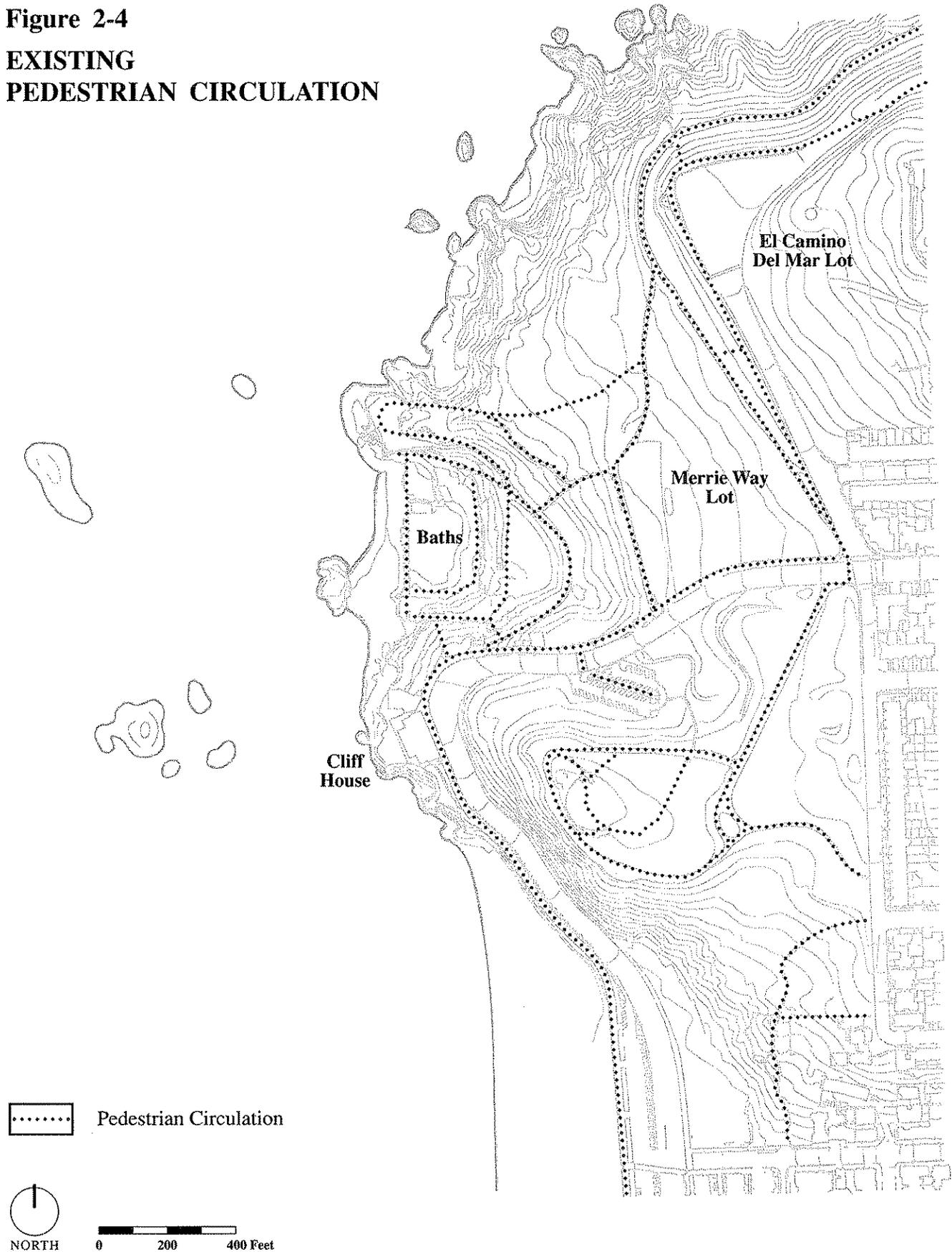
*So it now becomes necessary to view all items in the world as reflections, all objects as mirrors, and then move upon this basis.*

The design approach here will be one of deliberate restraint so that the ruins continue to resonate with the mystery and allure of their present deteriorating condition. The bowl-shaped landform of the Baths will become a magnificent outdoor room which celebrates the archetypal interrelationship of human civilization and the sea. Both biotic and cultural landscapes will be enhanced and made accessible to tell the story. Portions of the Baths' existing foundations will be excavated to reveal their original mass and footprint. In other areas, selected wall and column elements could be repaired according to cultural landscape guidelines to enhance the on-the-ground experience. Non-historic rubble on the hillside below the Promenade will be removed. The open water area within the foundation walls which has become an important waterfowl habitat will remain and will actually be expanded when the entire footprint is excavated. A thin film of water will cover, but not obscure, walls which compartmentalized the five smaller baths. The wetland immediately east of the Baths foundation will be expanded, through regrading and revegetation, to offset any habitat which will be lost through the excavation within the foundation. Native plant restoration throughout the Baths area will soften the visual appearance of the ruins and enhance the experience of the culture-nature dynamic.

A hierarchy of pathways, steps and catwalks will permit intimate contact with the ruins while protecting unstable slopes and sensitive habitat areas and directing visitors away from unsafe situations (Figures 2-4, 2-5). The primary "Gallery Walk" will connect the Cliff House area with the Waterworks Overlook at a nearly constant elevation of 55 feet above sea level. This will, with the use of the Cliff House elevator, create barrier free access to the most significant portions of the site. The Gallery Walk will interpret the detailed story of the construction and daily activities of the Baths through stabilized architectural remnants. At a lower elevation, and accessible via a set of stairways, a steel catwalk on axis with the tunnel entrance, will skim the surface of the seawall foundation ruins (Figure 2-6). The catwalk will bring users to the ocean's edge to experience its pyrotechnics at close range. A system of gates would permit temporary closure if site conditions are unsafe or if seasonal closures are necessary to prevent disturbance to waterfowl.

At a higher elevation, visitors will be able to descend into the Baths area along the emergency service access from Point Lobos Avenue. This narrow and relatively steep roadway will be surfaced with turf block and native grasses so that it will effectively disappear against the slope. At its intersection with the Grand Stairway, the roadbed will become level so that a temporary stage could be put in place for special events. The slope conditions are

**Figure 2-4**  
**EXISTING**  
**PEDESTRIAN CIRCULATION**

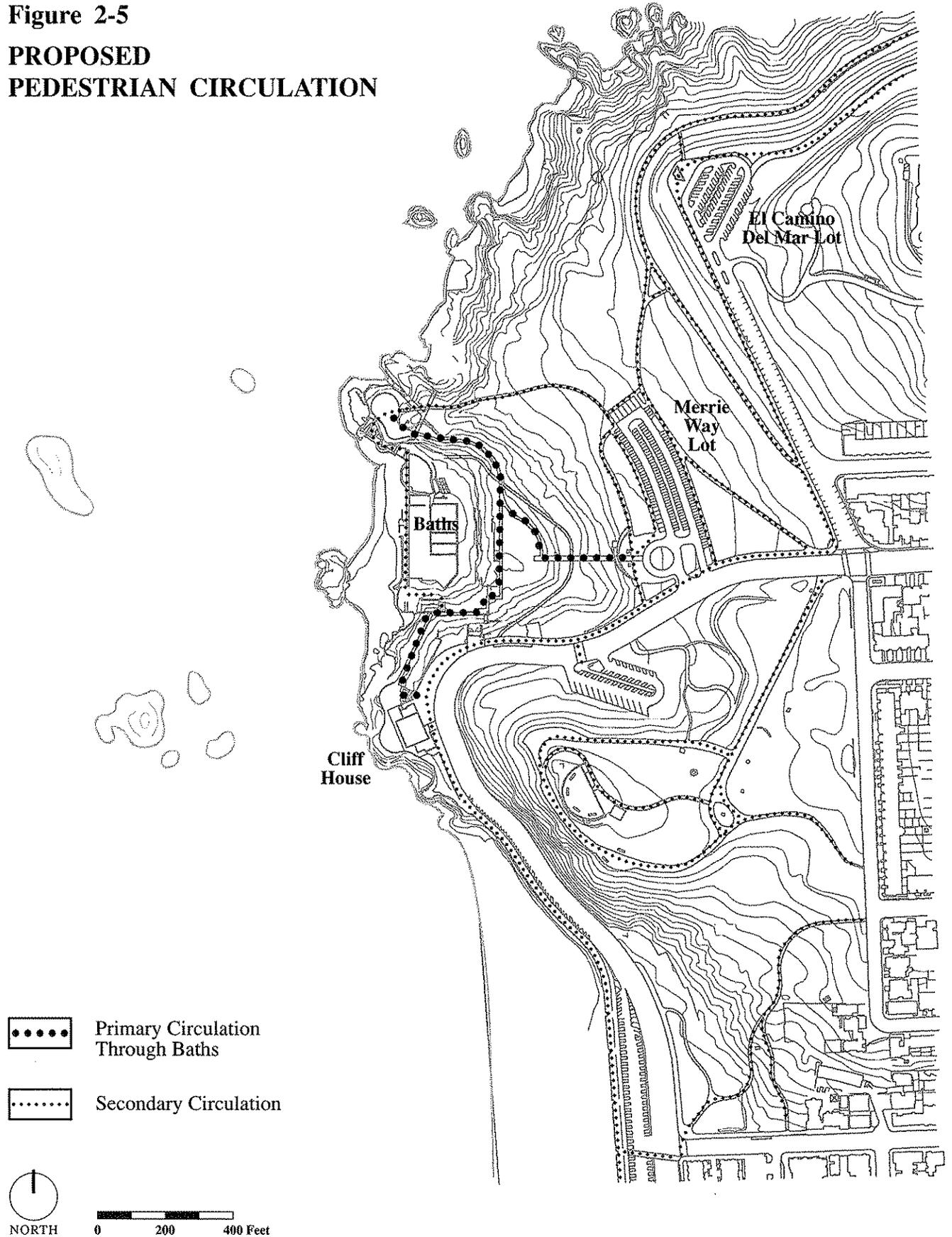


 Pedestrian Circulation

  
NORTH

  
0 200 400 Feet

**Figure 2-5**  
**PROPOSED**  
**PEDESTRIAN CIRCULATION**



such that handicapped visitors will have access from Point Lobos Avenue to this level area.

The Grand Stairway, a reference to a similar element in the original Baths, runs perpendicular to the other three pathways. This system of rustic stone steps and terraces connects the lower Baths area—via boardwalks and paths around the freshwater wetland—with the Visitor Center Complex. It will be well integrated into the slope and flanked with native vegetation. Steps will broaden in certain areas to create outdoor seating. Following more detailed surveys of wetland habitat and significant ruin elements, the stairway will be field located to avoid impacting any of these sensitive resources.

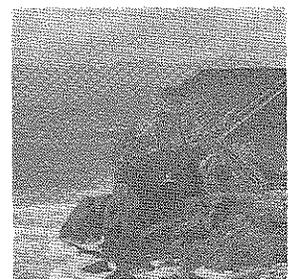
### ***The Waterworks***

The Sutro-engineered “Waterworks” will be partially reactivated to inform visitors about the potential of tidal forces. A complete restoration would conflict with the established brackish wetland pool frequented by waterfowl. The incoming tidal waters will, therefore, enter the catchment basin, flow through the access tunnel to a weir which regulates the flow into the former Aquarium or Settling Basin. From here the water will enter the narrow outlet channel and be returned to the sea. Water movement to the steam plant and into the various pools will be explained by interpretive signs. Conditions in and around the Aquarium Basin will be monitored after the Waterworks are rehabilitated to determine if it is possible to create an intertidal habitat that would be able to sustain itself with minimal maintenance. For the short term, large boulders will be placed in the bottom of the basin to create more suitable attachment surfaces for marine life.

A new steel catwalk around the rocky headland north of the basin will connect the Baths and tunnel entry area to the dramatic Waterworks Overlook above. This observation area will be unprotected from the elements—a place where visitors can take their chances on being drenched by incoming waves. Walls and steps will be upgraded, but no other improvements are anticipated. Simple narrative inscriptions in the pavement would interpret or inspire. A ridge trail will connect this overlook to the Merrie Way parking lot.

### ***Landform and Landscape Rehabilitation***

Contouring of several areas within the site will be required to stabilize slopes and slow the currently unchecked process of erosion. A new underground stormwater system will also be designed to direct runoff. Future construction on the site will be required to meet strict federal environmental standards for slope stabilization and erosion control. The extent of potential impacts and the resultant required mitigation techniques cannot be known until new



*The Waterworks Today*

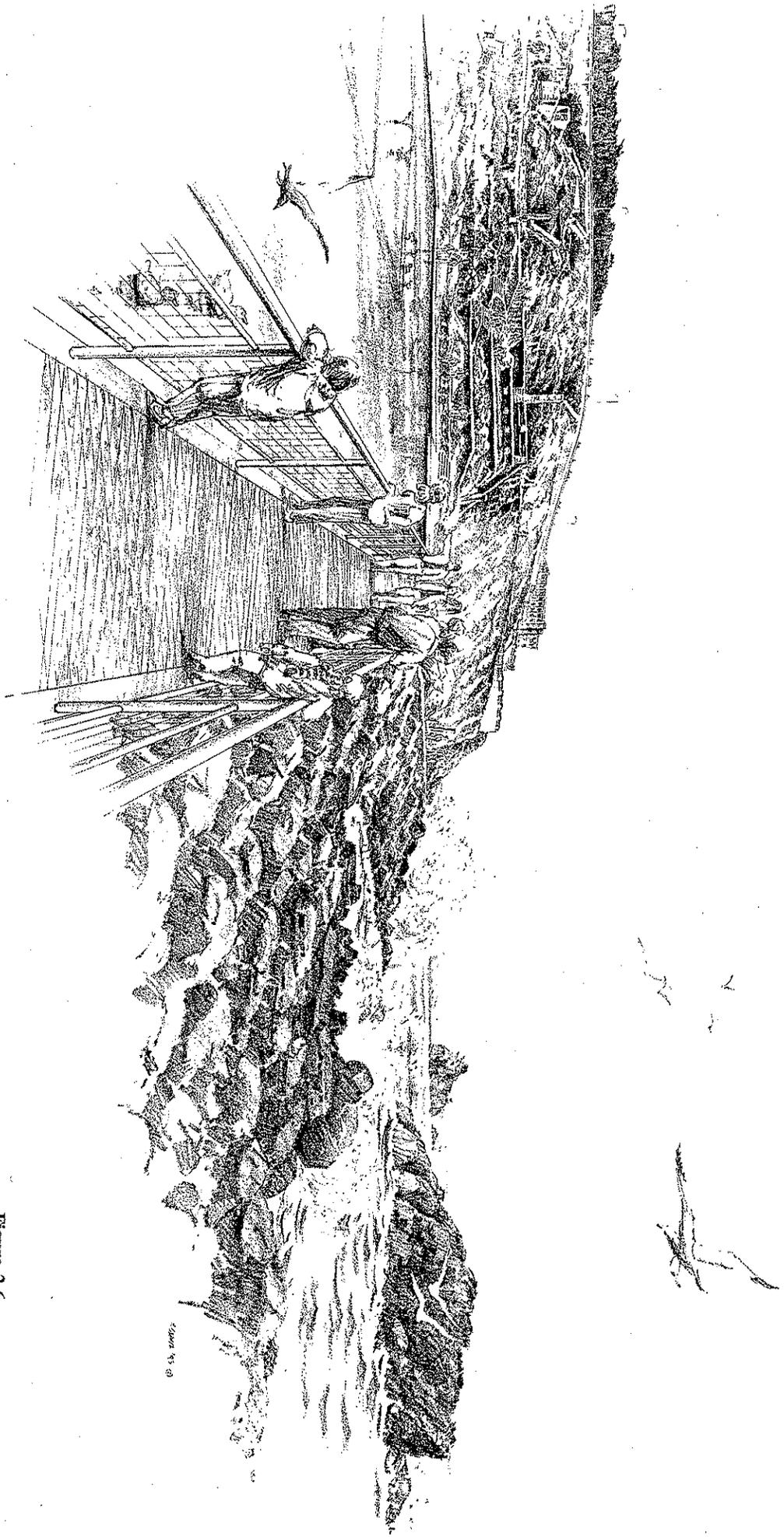


Figure 2-6  
VIEW FROM CATWALK



facilities are designed in greater detail than is appropriate at a Comprehensive Plan level.

A revegetation scheme is assumed in the proposed design (Figure 2-7). Native habitats at Sutro Heights, Sutro Baths and Land's End will be revitalized to expand biotic diversity and enhance the interpretive potential of natural resources on the edge of the continent. The plan proposes a system of pathways and cat walks which will lead visitors through a complete site experience while controlling access to the more fragile portions of the site. Some pathways will also be closed to visitors during times of the year that are critical to wildlife. Slopes will be stabilized with native vegetation, after they are regraded, to prevent continued erosion and to contain foot traffic. Drought tolerant landscape materials will demonstrate water conservation, although a temporary irrigation system will be required until native plants become established. The freshwater wetland habitat will be expanded and restored as part of the rehabilitation of the Baths area (Figure 2-8). The remnant dune areas at the Baths and South Sutro Heights would also be restored. The intent of the site revegetation program is to restore plant communities that once existed in the Sutro District.

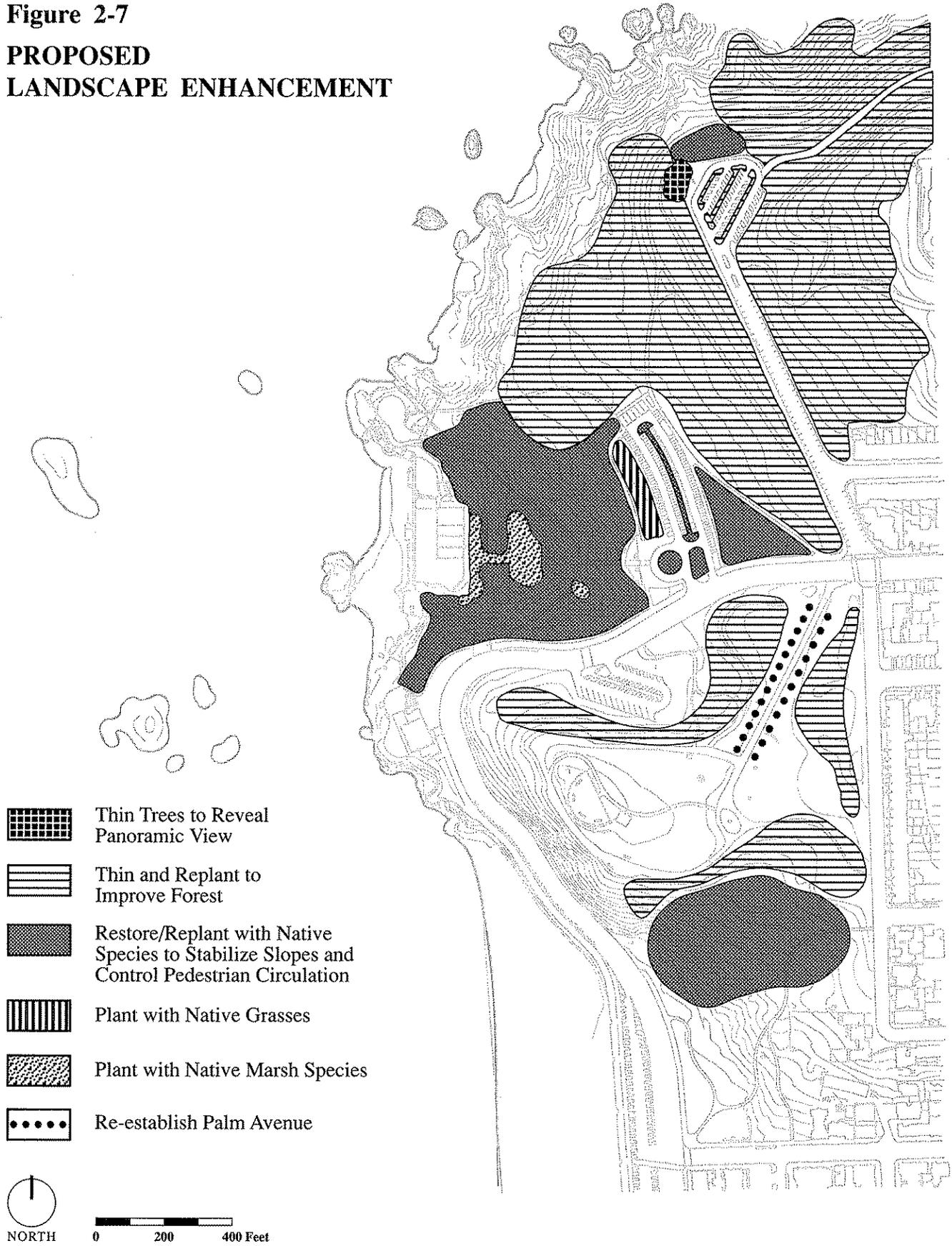
### ***Sutro Heights***

The Heights will continue to function primarily as a neighborhood park, as recommended in the *NPS 1992 Cultural Landscape Analysis and Management Recommendations* report. A pedestrian linkage to the Heights from the Visitor Center Complex will be available via the historic Ferries and Cliff House Railroad alignment from the Merrie Way parking lot to the corner of 48th and Point Lobos Avenues, continuing up to the Heights via Palm Avenue, the historic vehicular access to the site. The formal landscape along Palm Avenue will be restored and naturalized landscape areas will be rehabilitated. Portions of the historic pathway network will be reestablished connecting Palm Avenue with the Sutro home site and to the Parapet and Esplanade beyond.

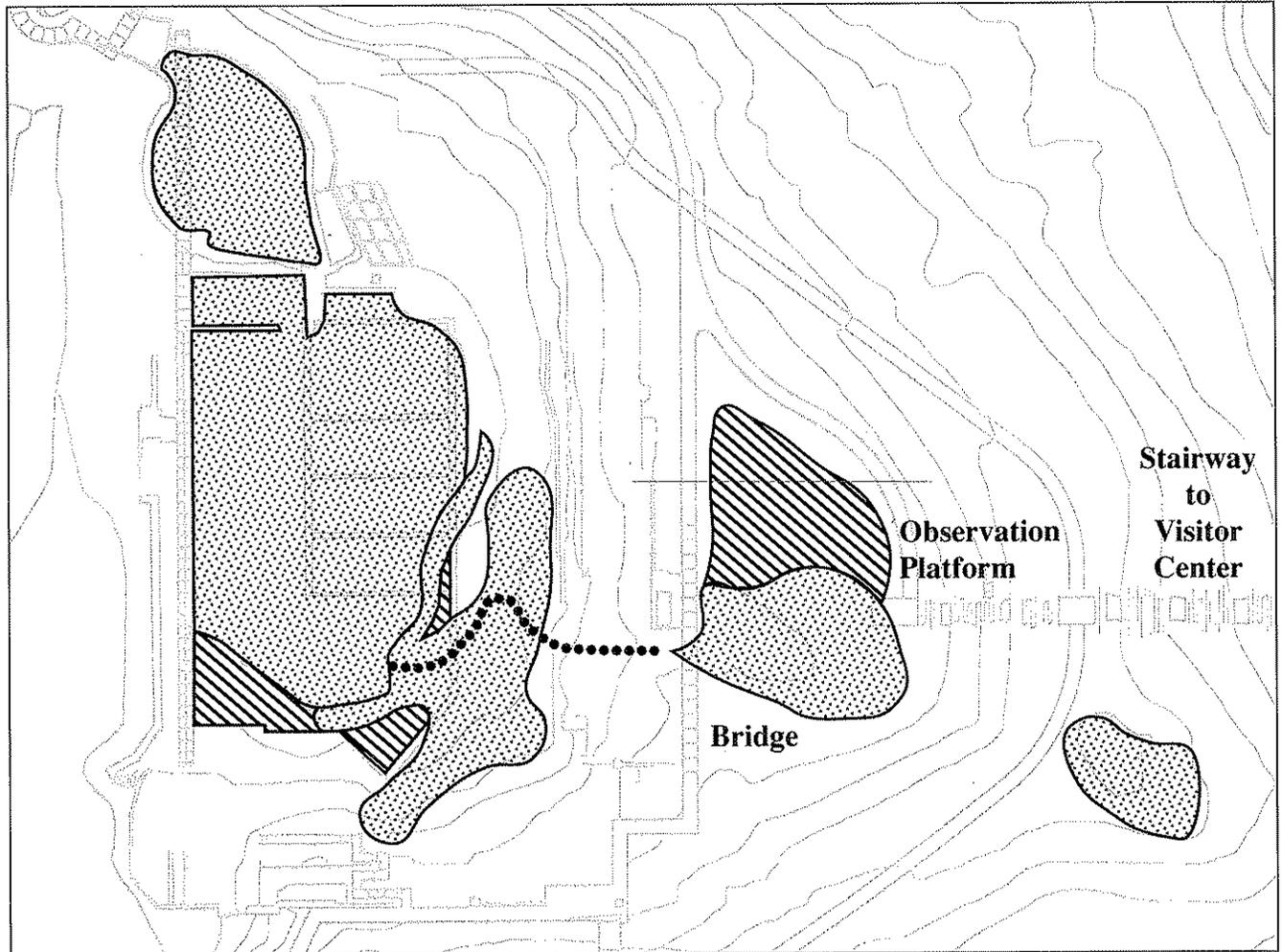
Stone or concrete "footprints" of the Sutro home and other significant structures will be installed to enhance the interpretive potential of the area and the open lawn will be maintained for passive recreation. WPA changes to the Parapet will be removed. Selective clearing of vegetation and the addition of benches will also improve this dramatic overlook. Serpentine Drive will be maintained and interpreted; it will also function as a service access for small vehicles from the NPS employee parking lot.

The Dune Trail, south of the Heights, will be improved to strengthen the linkage to Ocean Beach and beyond to Golden Gate Park.

**Figure 2-7**  
**PROPOSED**  
**LANDSCAPE ENHANCEMENT**



**Figure 2-8**  
**WETLANDS ENHANCEMENT**



-  Existing Wetlands
-  Proposed Wetlands
-  Seep Channel



***Land's End and the USS San Francisco Memorial***

North of the Visitor Center Complex and parking lot the historic Cypress plantation will be managed to establish a diverse forest canopy. The trail along the historic railroad alignment will be narrowed and resurfaced and will continue to be the primary pedestrianway from the parking lot to Land's End Overlook. The USS San Francisco Memorial will be relocated on axis with El Camino Del Mar and the surrounding landscape will be redesigned to give it a more ceremonial presence (Figure 2-9). A larger paved gathering area and a greater separation from vehicular circulation will be provided. Its current compass orientation on the Great Circle to Guadalcanal is symbolic and significant and will be maintained in the redesign. The memorial will become a strong focal point as viewed from the 48th and Point Lobos intersection. Parking in this area will be redesigned to eliminate the vast expanse of asphalt which now exists and to provide a more comfortable pedestrian environment.



*USS San Francisco Memorial*

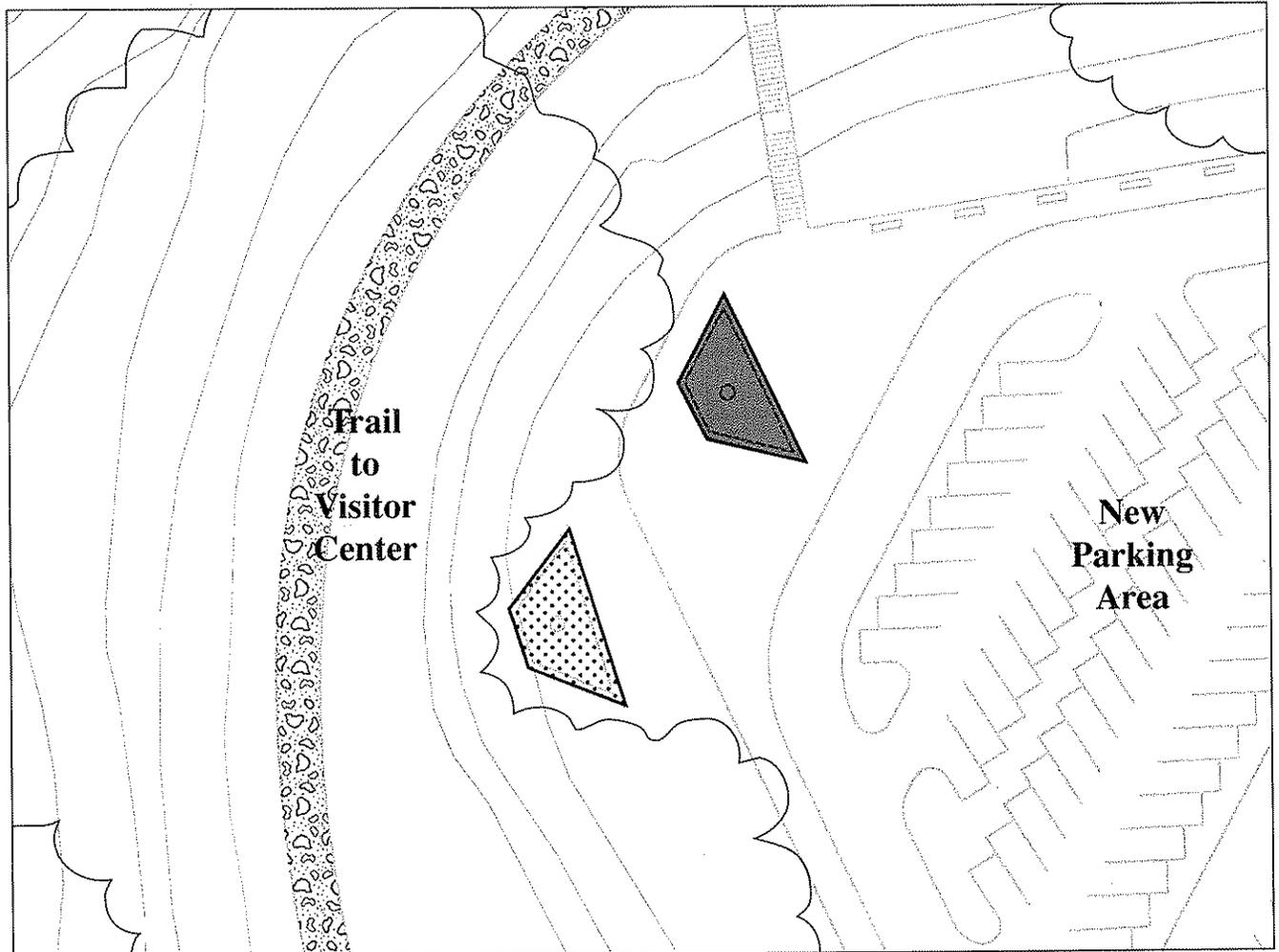
New benches and interpretive signs are envisioned for the Overlook. Careful selective clearing of the forest canopy will open views to the north to the Marin Headlands and to the south to the Waterworks Overlook. A new stairway will connect the upper overlook with the historic railroad trail below. Trail connections to Lincoln Park and east to Baker Beach and the Golden Gate Bridge will be improved.

To the extent feasible, for reasons of visitor safety and security, other "social" trails in this area will be eliminated, and new warning signs placed in potentially hazardous places. Trails leading to extremely dangerous cliff areas will be closed.

***Barrier Free Access***

Barrier free access throughout the entire site is not possible due to the 150 foot elevation change at the Baths area. Further, the site would be visually impacted if ramps and switchbacks or even funiculars were provided to move handicapped persons through the site. Drop-off/loading areas for the handicapped will be provided at both the Visitor Center and the Cliff House. An elevator at the Visitor Center will provide access to the viewing deck and the interpretive and museum areas. At the Cliff House, an elevator will provide access to the Cliff House, the restaurant terraces and to a level "gallery walk" pathway through the Baths to the Waterworks Overlook at Elevation 55. Where the gradient makes it feasible, all proposed sidewalks and trails will meet ADA standards.

**Figure 2-9**  
**MEMORIAL RELOCATION**



Existing Location of U.S.S. San Francisco Memorial



Proposed Location of U.S.S. San Francisco Memorial \*

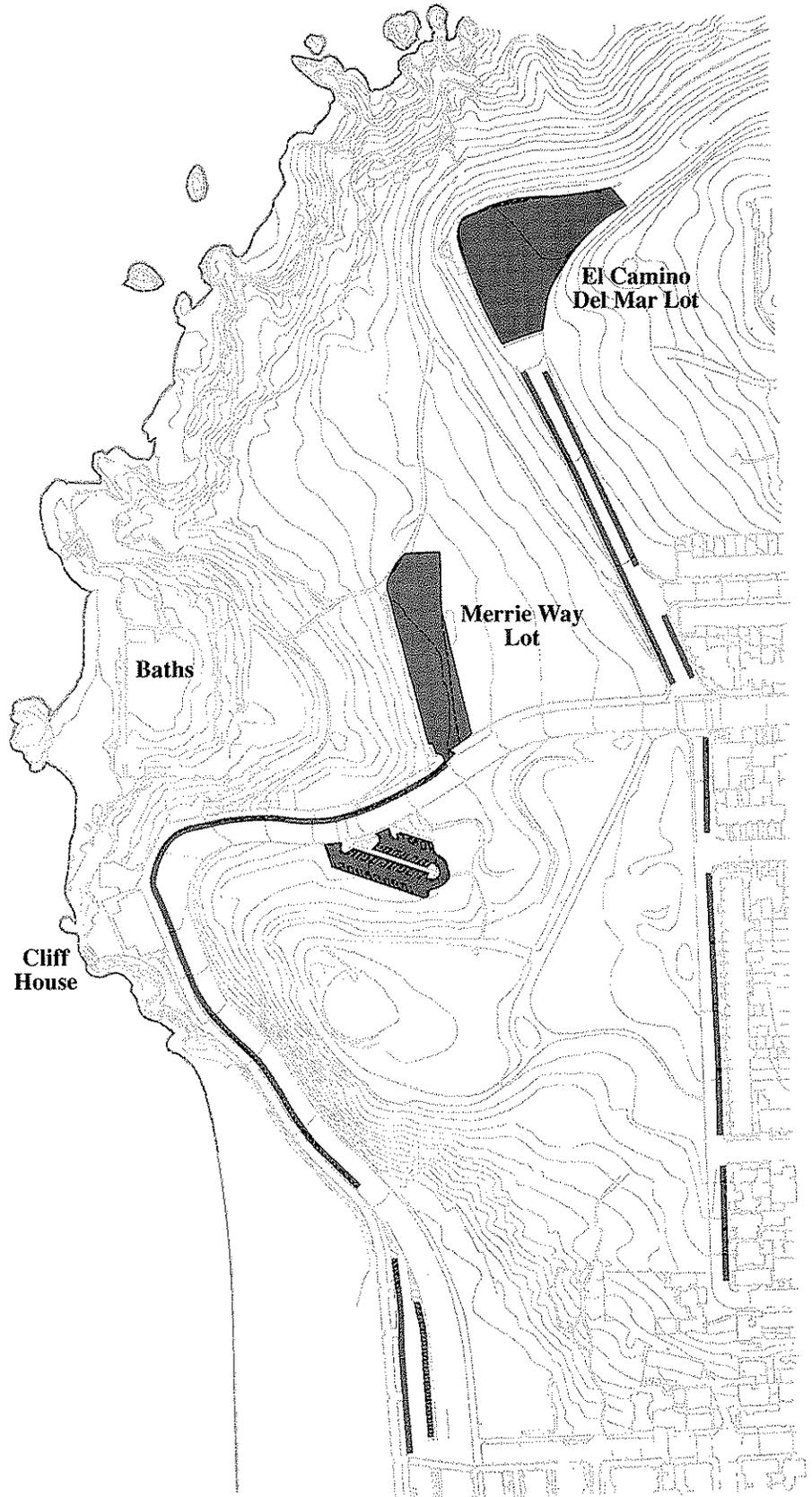
\* Alignment with Great Circle to Guadalcanal to be maintained.



NORTH



**Figure 2-10**  
**EXISTING**  
**PARKING**



NORTH

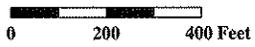
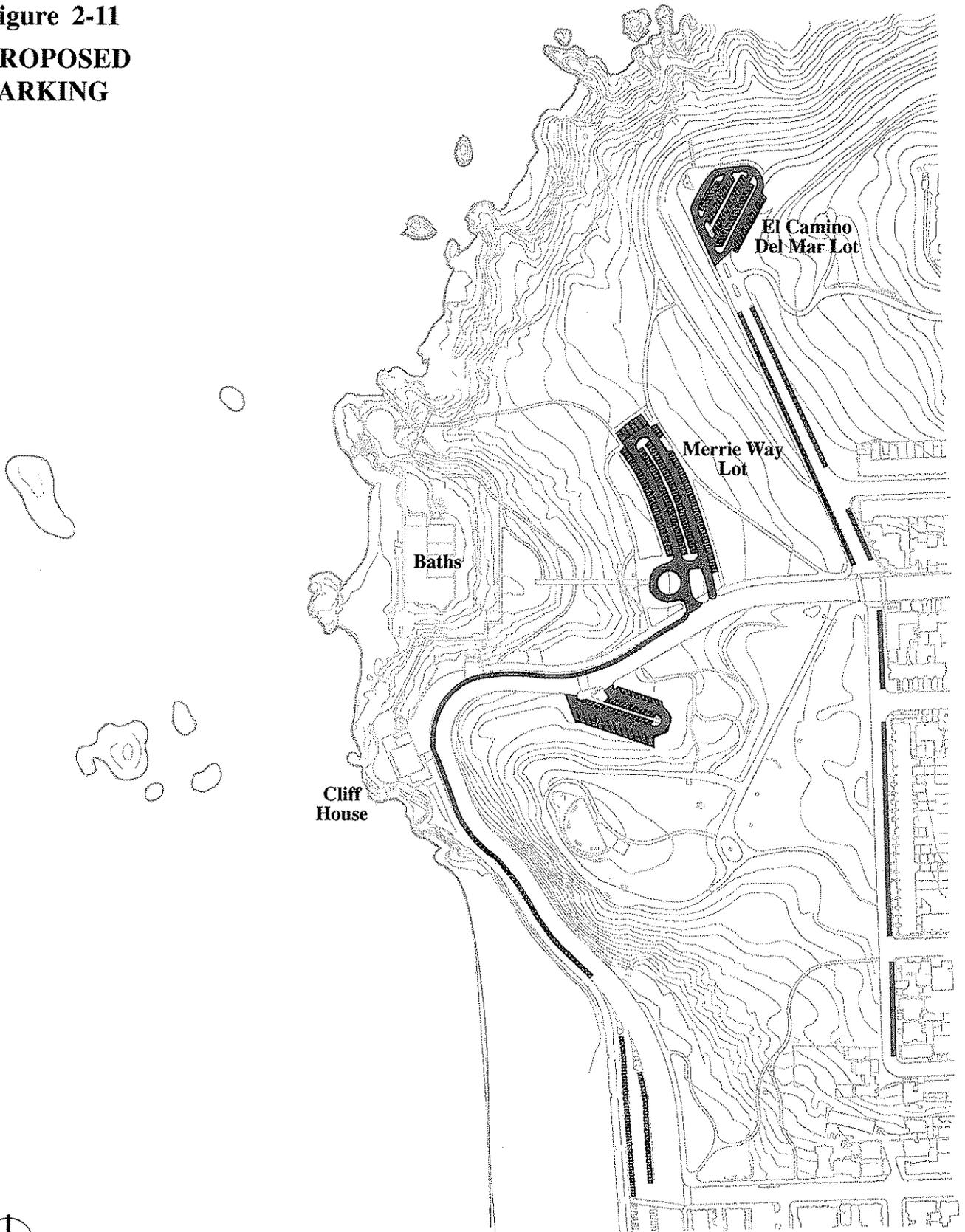


Figure 2-11  
**PROPOSED  
PARKING**



edge of the City. The NPS has successfully managed tour bus operations at other GGNRA locations. More than the required "high season" demand tour bus spaces will be provided to encourage this type of transit. Muni bus stops serving the area will be maintained in their present locations until the future transportation management plan for the area determines the need for a change.

The Merrie Way parking lot will be reconfigured to separate tour bus drop-off from passenger vehicles; access and egress have been separated to facilitate all turning movements; detailed road striping design will be required to emphasize the appropriate turning movements from Point Lobos Avenue (Figure 2-12).

The lot at Merrie Way will be terraced into the slope with broad planted medians. It will be paved with permeable materials to soften its visual impact. A subsurface filtering system which would mitigate the impacts of potentially toxic materials will be further explored in the design phase of the project. The construction of the lot will be phased over time in conjunction with TSM. Overflow parking will be accommodated in the grass meadow on the western edge of the lot and at other areas such as Ocean Beach. If transportation management proves effective, the meadow will remain undeveloped. The NPS anticipates that the Sutro Historic District site will establish a model for sustainable site and architectural development, and the parking lot would be designed accordingly. The Point Lobos parking lot will be retained and will service primarily employees and tour bus parking (not drop-off or pick-up) to decrease pedestrian foot traffic across Point Lobos Avenue. This new circulation system assumes that visitors will be staying in the District for longer periods of time because of the greater quality of the facilities.

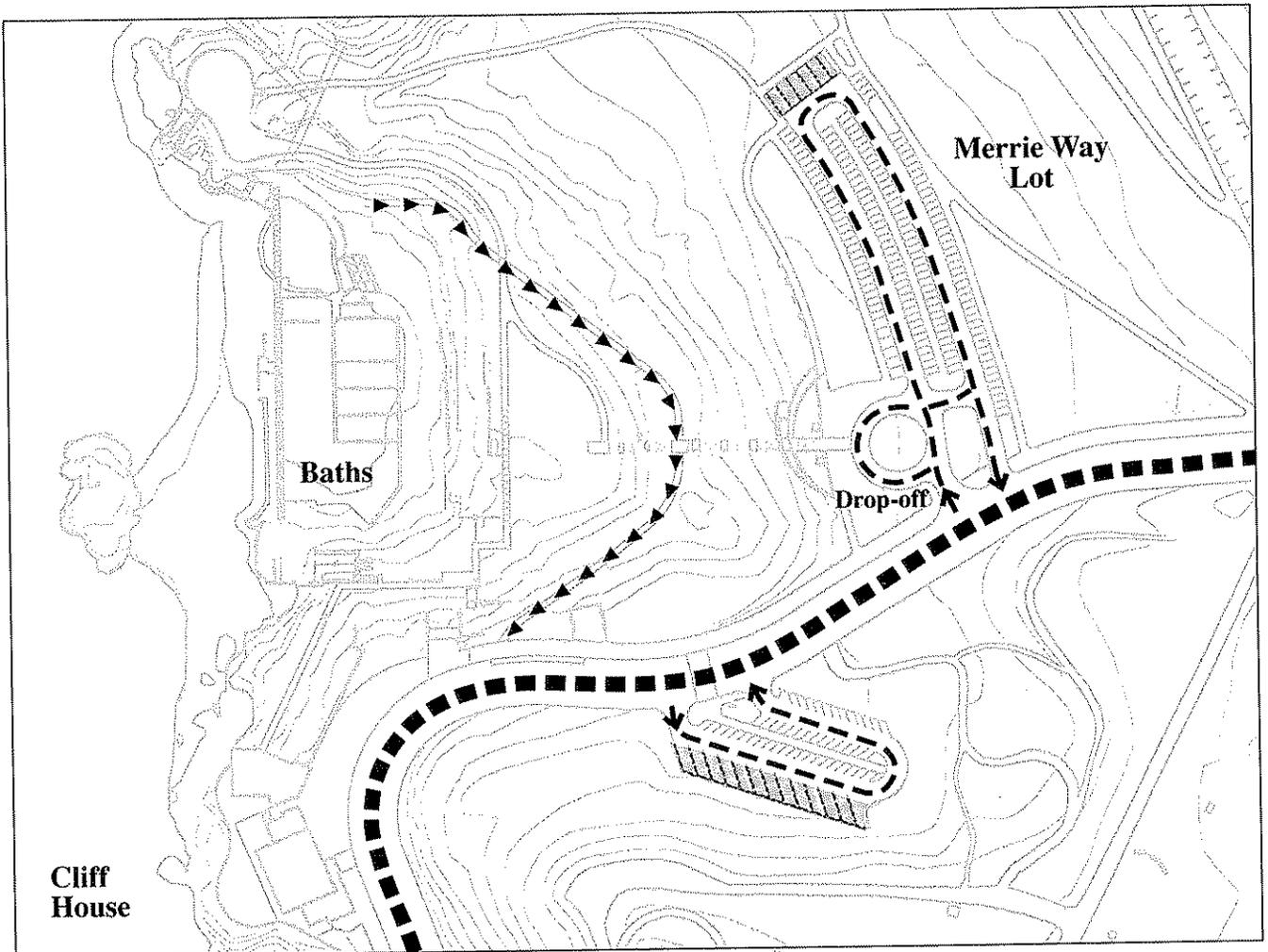
The continuous angle parking in front of the Cliff House will be designated for 10 minute drop-off parking; as many as five handicap spaces will also be provided here. Tour bus pick-up will occur primarily in the vicinity of the Visitor Center and a golf cart type tram may be developed to shuttle visitors between the Visitor Center and the Cliff House. On-street parking along Point Lobos Avenue and El Camino Del Mar will continue, however, new striping will add to its efficiency.

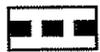
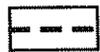
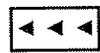
### **Transportation System Management (TSM)**

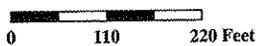
#### **Proposed TSM Program Elements**

- On-site traffic control monitors, directing traffic towards available parking and away from local residential streets and neighborhoods;

Figure 2-12  
PROPOSED VEHICULAR CIRCULATION



-  Primary Vehicular Circulation
-  Secondary Vehicular Circulation
-  Emergency Access
-  Tour Van Parking



- Improved directional signage and markings;
- Neighborhood parking control measures (signs, permits, time limits, etc.) to keep visitors out of the neighborhoods;
- Drop-off parking area in front of the Cliff House to separate these vehicles from the main traffic stream;
- Restricted tour bus size and number permitted as previously accomplished at other NPS facilities;
- Controlled flow of buses so that arrivals are dispersed throughout the day rather than all at one time.

#### Proposed Parking Mitigation

- Keep the Point Lobos Lot available for employees and NPS staff only, and enhance safety of pedestrian crossing at Point Lobos Avenue;
- Expand the Merrie Way lot capacity with overflow area;
- Keep tour buses (small) in the Merrie Way lot, and use El Camino del Mar for auto parking only;
- Assume some use of the Ocean Beach parking lot (not assumed previously for existing or future projections) for overflow area;
- Tie any increase in the number of visitors and tour buses to the Presidio Plan;
- Restrict turning movements in and out of parking lots;
- Create a left-turn bay (for stacking) and stacking area in the middle of Point Lobos Avenue to help vehicles move into and out of the main traffic flow;
- Direct pedestrians from the Merrie Way parking lot to the crosswalk at 48th Avenue/El Camino del Mar to get to Sutro Heights Park.

Essentially what will occur in practice will be a self-limiting National Park facility. If parking is not available, motorists will be encouraged to continue on to another location (Golden Gate Park, Presidio, etc.). Traffic monitors on weekends will be able to control the flow of vehicles in the area, thus increasing safety for motorists and pedestrians. The demand will largely be

market driven, whereby if the facility is full, people will move on or not come.

### *Design Criteria*

Site furnishings, building materials and detailing for the District will be coordinated in a future design criteria document. Particularly if the construction work for the site is accomplished in phases, this will be a critical step in the development of a coherent image for the District.

Materials used in Sutro's time—glass, concrete, stone and metal—are an appropriate vocabulary today. These will be the predominant materials used in the design of both structures and landscape amenities with due consideration given to their ability to withstand weathering. Contemporary and timeless elements of the highest quality are preferable to an obviously “themed” look. Recycled materials from site demolition would also be appropriate particularly if their use can be interpreted. Seating elements, trash receptacles, light fixtures, railings and concrete finishes will share the same detailing and be historically compatible throughout the District. Less will be more. It is imperative that the site not be cluttered by site furnishings and interpretive signs. A most important aspect of enhancing the visitor's experience will be to let the site speak for itself.

## **2.4 COSTS**

A preliminary cost estimate was developed for the proposed Comprehensive Design (Table 2-2). The estimate is based on costs of similar construction and is intended to illustrate order-of-magnitude capital improvement expenditures which can be anticipated for the proposed development of Sutro Historic District.

**Table 2-2  
Estimate of Probable Construction Cost**

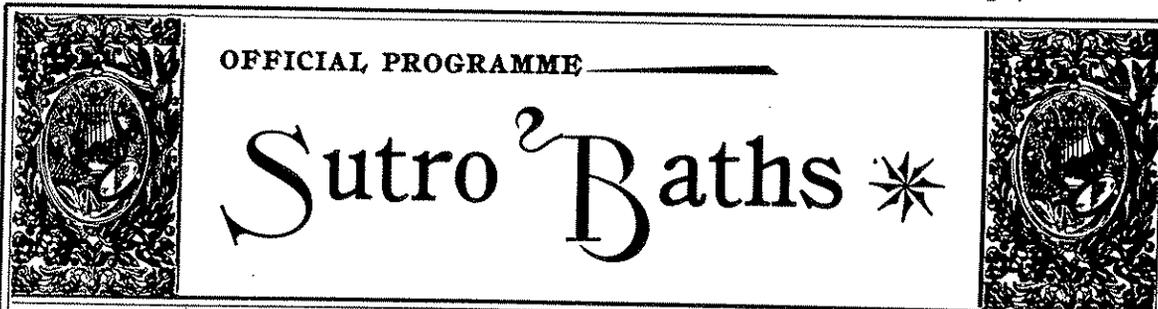
<b>Buildings</b>		
Visitor Center	1,900,000	
Furnishings	227,000	
Exhibits	380,000	
Cliff House Renovation	3,100,000	
(including elevator/observation tower, Camera Obscura and weather exhibits)		
Baths Foundation Rehabilitation	225,000	
Waterworks Rehabilitation	<u>280,000</u>	
	Subtotal	6,112,000
<b>Site</b>		
Demolition / Clearing	61,000	
Rough Grading	180,000	
Fine Grading	91,000	
Irrigation	140,000	
New Landscape	435,000	
Landscape Rehabilitation	250,000	
Paving and Surfacing	1,020,000	
Parking Lot (Merrie Way)	730,000	
Catwalks/Boardwalks	880,000	
Walls/Railings	375,000	
Grand Stairway	120,000	
Site Furnishings	380,000	
Environmental Graphics	300,000	
Laser Exhibit	<u>100,000</u>	
	Subtotal	5,062,000
<b>Utilities</b>		
Drainage	157,000	
Water	24,000	
Sanitary Sewer	26,000	
Electrical	58,000	
Telephone	8,600	
Natural Gas	<u>3,600</u>	
	Subtotal	277,200
	Total	11,451,200
		11,451,200
Contingency (15%)		1,717,680
Design and Engineering (15%)		1,975,332
General Conditions (7%)		921,816
Contractor's Fees (6%)		790,128
Bonds (1.5%)		197,532
Construction Administration		<u>100,000</u>
	<b>Grand Total</b>	<b>17,053,688</b>

### 3. SUMMARY OF FUTURE ACTIONS

Implementation of the Comprehensive Design Proposal is dependent upon several key studies which will be undertaken by the National Park Service prior to or in conjunction with the detail design or construction of improvements at Sutro Historic District.

1. Detailed archaeological resources analysis;
2. Feasibility study for reactivating portions of the Waterworks;
3. Detailed plant and wildlife inventories (see BioSystems report);
4. Feasibility study for expanded marsh (including determination of most appropriate habitat type);
5. Native habitat restoration plans for the riparian wetlands above Sutro Baths, and the dune areas east of Merrie Way parking lot and at Sutro Meadows;
6. Design Criteria for site structures and furnishings;
7. Detailed interpretive program;
8. Vegetation management plan;
9. Geotechnical analysis for slope stability;
10. Detailed structural analysis of Cliff House;
11. Architectural program development for Visitor Center;
12. Mitigation plans for all proposed facilities;
13. Architectural program development for Cliff House (to include Camera Obscura);
14. Concession program development/financial analysis for Cliff House;
15. Joint management agreement with the City of San Francisco concerning the sidewalk use, traffic flow and public transit;
16. Detailed bicycle study;
17. Pedestrian crossing analysis (Ocean Beach to Parcel 4).

Near Sutro Baths is Billington's Gallery. — Good Portraits or Groups, 25c each



OFFICIAL PROGRAMME

# Sutro<sup>2</sup> Baths \*

Published by the Management. — Office SUTRO BATHS, Telephone Steiner 3041.

## Firth Wheel

## Scenic Railway

# The Sutro Baths.

SIGHT alone can give a comprehensible idea of the building. They are certainly the largest enclosed Baths and Winter-Garden in the world. Some approximation of their magnitude may be reached from the following figures:

Length of Building.....500 feet  
 Width .....255 feet  
 Lumber used in construction, 3,000,000 feet  
 Glass used.....100,000 superficial feet  
 Iron in roof and columns.....600 tons  
 Concrete.....270,000 cubic feet  
 Seating } Amphitheatre 3,700 }  
 Capacity } Promenade.....3,700 } ..... 7,400  
 Holding Capacity.....25,000  
 Length of large Swimming Pond, 300 feet  
 Width, for two-thirds of length.....100 feet

Width, for one-third of length. ....175 feet  
 It is L-shaped.  
 Small tanks of various temperature.....5  
 Capacity of 6 salt-water baths, 1,900,000 gals.  
 Fresh-water plunge baths.....1  
 Private dressing-rooms.....517  
 Club-rooms .....9  
 Total capacity of  
 private and club-rooms...1,628 bathers  
 Shower-baths in all club-rooms, and in 29  
 private dressing-rooms.

The mode of supplying ocean-water to these Baths is noticeable and unique. A catch-water in the cliffs is constructed (a large basin in the rocks.) Twice a day, at high tide, the baths, with a capacity of nearly 2,000,000 gallons, can be filled in one hour. For several days in Midsummer, during the neap or low tides, it is necessary to pump water—pumping consumes five hours. The fresh-water plunge is supplied by an ever-flowing spring, and is an excellent drinking-water (see cups and small stream above water mark.) To the baths is attached a laundry with all modern machinery; its capacity is 20,000 suits and 40,000 towels per day.

The Museum and Picture Gallery deserve the attention of visitors, especially are they object lessons to young people and children. The collection of Shells is a marvel, and one of the best in America.

Many of the Pictures are highly prized, being the works of very eminent painters. The Intaglios (casts from antique gems) is the best collection in the United States. Sea-water at Ocean Temperature and up to 80°

No Better Sea-Bathing in the World.

## Haunted Swing

## Mirror Maze

See **UMBSEN & CO.** about Ocean Boulevard Lots  
 Office, 14 Montgomery Street.

## 4. OPPORTUNITIES AND CONSTRAINTS

The following opportunities and constraints formed the basis for the Design Proposal presented in Section 2.

### 4.1 HISTORICAL BACKGROUND

The Sutro Historic District has been significant in the development of recreation within the City of San Francisco for well over 100 years. From the beginning of settlement in the Bay Area, people have been attracted to the site because of its natural features, spectacular views and the exciting experience of the land/ocean “edge.” The period generally considered to have historical significance is from 1863 to 1938. The chronological development of the District is well documented in the Cultural Landscape Evaluation, and only briefly summarized here.



*Adolph Sutro*

Adolph Sutro was a German-born engineer who built his career in the late 1860s and 1870s through the design and construction of a massive tunnel that drained and ventilated the flooded shafts of the Comstock Lode silver mines in Nevada. The construction of the Sutro Tunnel, which provided the basis for countless fortunes in silver, is also recognized for having greatly improved the working conditions of the miners themselves. This combination of ingenuity and benevolence characterized Sutro’s later work in San Francisco.

While it can be surmised that indigenous residents also used the area for subsistence purposes, the first Cliff House constructed in 1863 marked the beginning of a period where significant changes to the landscape at Lands End occurred. Adolph Sutro purchased land including the acreage within the boundaries of the current District in 1881, accelerating the pace of development. Sutro constructed the second, more ornate Cliff House and the famous Baths, and developed extensive gardens within the Heights. Remnants of the Sutro era development can be seen today at both the Heights and Baths, however, a third Cliff House structure, constructed in 1909 by Sutro’s daughter and modified significantly over time, replaced the previous grand structure. Sutro died in 1898, during the height of the historical significance of the District.

#### *Sutro Heights Development*

Sutro purchased approximately 100 acres of land including a small cottage overlooking the promontory above the Cliff House which he enlarged for his own residence. Most of the earlier improvements to the area were focused

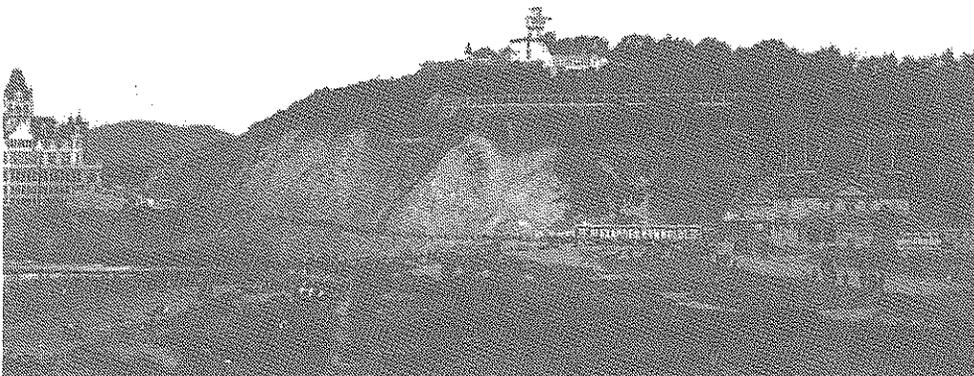
within the Heights, including developing a new main entrance at Palm Avenue, on the corner of the present 48th Avenue and Point Lobos Avenue. The entrance location coincided with the placement of a new depot of the Ferries and Cliff House Railroad located across the street. The main gate at Palm Avenue was characteristic of the enormous and grand changes constructed by Sutro's workers. Towering more than 25 feet, the gate was a highly decorative wood structure flanked by two statues of reclining lions.



*Sutro Heights Gate*

Sutro began an ambitious program of creating an estate within the Heights that was spectacular in its transformation from coastal scrub to ornamental gardens and extensive groves of mixed evergreen trees. In addition to Palm Avenue, other roadways were created on site including Serpentine Drive and the Esplanade, a carriageway that traversed the edge of the cliffs that was lined with ornamental wooden posts and chain fencing. The gardens were very formal in their layout and included references to European gardens of the era with planting beds of clipped hedges, carpet beds, and statuary. Sutro used primarily drought tolerant species in his planting schemes, many of which were imported from the Mediterranean region, Australia, and South America.

The gardens required a high level of maintenance, with a full time staff of eleven gardeners for planting, watering, and pruning. The water supply for the gardens was located in the springs found within the hillside below the Merrie Way parking lot at the Sutro Baths site. Windmills pumped the water to a 50,000 gallon storage tank located on 48th Avenue at A Street, and to another 15,000 gallon tank located atop the existing sandstone Parapet above

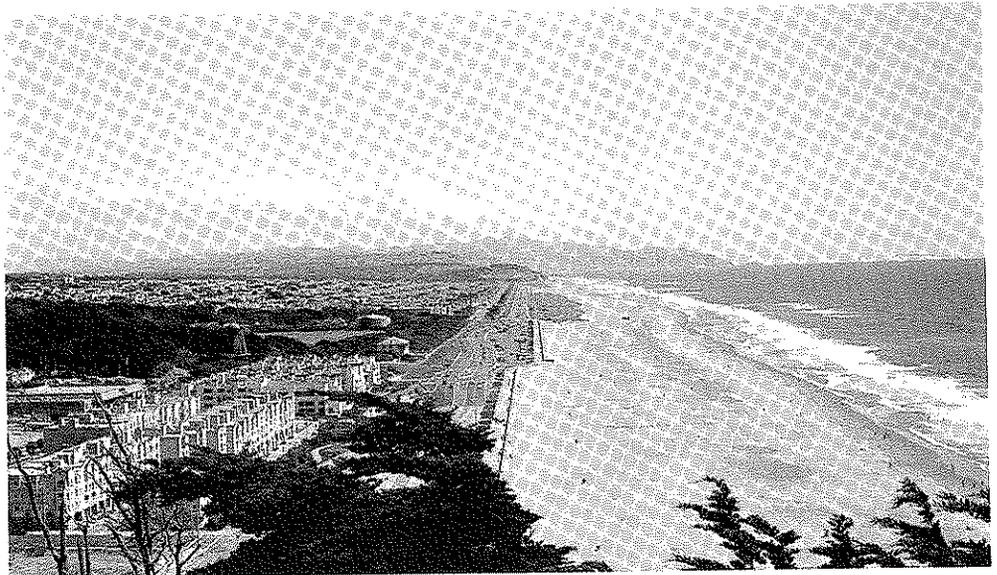


*Sutro Heights (1896)*

the Esplanade. The water was then gravity fed from these two high points to various portions of the site.

Several buildings were constructed at the Heights, paralleling development of the gardens. In addition to the Parapet viewing platform constructed in 1885 to capture the spectacular views of Ocean Beach and the Pacific Ocean, a long terrace-like structure known as the *Dolce far Niente* (Sweet to do Nothing) Balcony was also constructed in 1884-1885 as a wood deck cantilevering beyond the cliff face below the Esplanade. This lower balcony no longer exists. Other structures included a building for concessions, an observation tower, conservatory greenhouses and gatekeepers' houses. The last surviving building to remain from the Sutro era is the Well House, constructed around 1885. This building is located in the lower garden area where Serpentine Drive intersects with the beginning of the Esplanade.

Sutro Heights was opened to the public in 1885. Notable visitors to the Heights included President Benjamin Harrison, William Jennings Bryan, Andrew Carnegie, Oscar Wilde, and Kate Douglas Wiggin. By 1888, Sutro had aided in constructing the Ferries and Cliff House Railroad to transport visitors to the area. Following his death in 1898, the estate was administered by his daughter, Dr. Emma Merritt. An inventory and appraisal of the property was performed shortly thereafter, revealing the estate was in financial trouble. In 1899, Merritt sold interest in the Sutro Railroad Company and continued to resolve the financial burden of the estate over the next twenty years. Consequently, the condition of Sutro's gardens and properties began to deteriorate. The City of San Francisco acquired ownership of the Heights

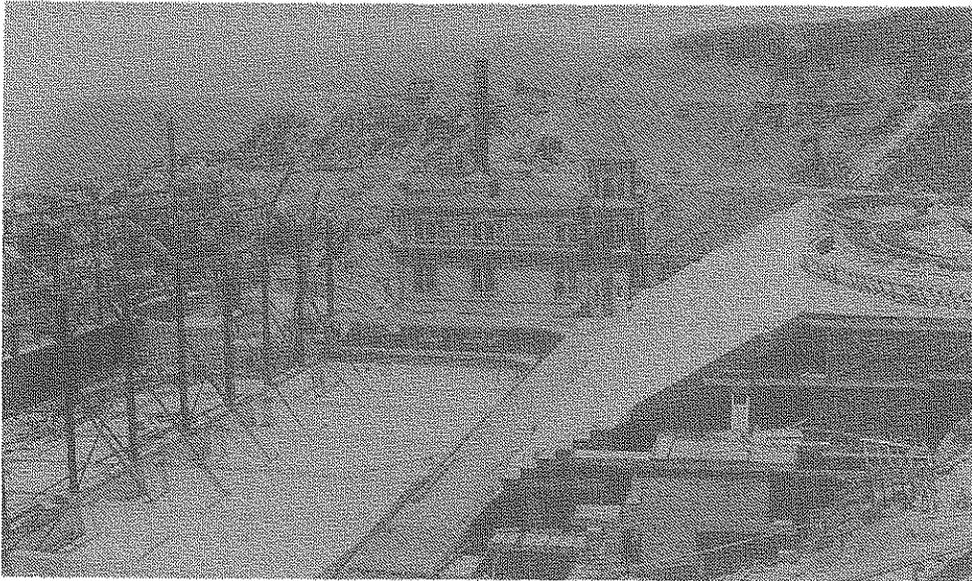


*View South from Sutro Heights Park (1993)*

in 1920 (but did not begin performing maintenance until 1933), under the condition that it be “forever held and maintained as a free public resort or park under the name of Sutro Heights”. Most of the structures were removed during the Works Progress Administration (WPA) era of the late 1930s. In 1976 the City of San Francisco transferred ownership of Sutro Heights to the National Park Service, to be managed as part of the Golden Gate National Recreation Area.

### ***Sutro Baths***

With the construction of the Heights well underway, Sutro began to focus on ideas for the area known today as the Sutro Baths site. He developed an interest in natural history and marine life and even pushed Congress to pass the 1887 act granting the Seal Rocks to the City and County of San Francisco in trust for the people of the United States, thereby protecting the seals’ home.



*The Baths Under Construction*

Sutro’s initial idea for the area was to construct a marine aquarium where visitors could view ocean mammals. He ingeniously created a system that allowed ocean water to fill a semi-circular enclosed basin during high tide events. The walls of the basin are still visible today near the northern portion of the Baths. Sutro was fascinated with the level shelf of rock just around the point from the current location of the Baths. He noticed that the shelf collected sea water at high tide and that its elevation was somewhat higher in elevation than the beach inside the cove. Working with the natural hydraulics of the site, Sutro’s solution involved collecting sea water in the natural shelf and channeling the water through a tunnel extending over 150 feet cut through the rocky point. A small door in the tunnel was opened to fill an

outer settling pond; sediment free water then dropped into the basin below. In one corner of the basin a subterranean outlet allowed water to recirculate out to sea. There may have been some intertidal marine life that collected and lived in the basin, but it is doubtful that a rich tide pool environment ever existed.

It is not clear from historical information where the idea for the Baths originated. Having travelled extensively throughout the US and Europe, Sutro had undoubtedly visited other classical as well as modern facilities and became inspired by the notion of recreational swimming on a grand scale. Whatever his reason, work began on the breakwater that would ultimately allow construction of the Baths in 1887. A design competition was held in 1890 to solicit architectural designs for the Baths structures. The identity of the winner has unfortunately been lost to the record, however, blueprints of the structures credit C.J. Colley and E.S. Lemme as the architects.

The early 1890s were a period of much activity on the site including rock blasting, tunnel digging, hauling of sand for use in concrete, clay lining of slopes for erosion control, and the hauling of lumber from other sites to build forms and trusses. When the Baths were dedicated and opened to the public in November, 1894, they were comparable to only a few buildings in the United States in terms of scale and technical achievement. They were also compared, by London-based author Alfred Cross in the *Public Baths and Washhouses*, to the famous ablution resorts of Titus, Caracalla and Diocletian.

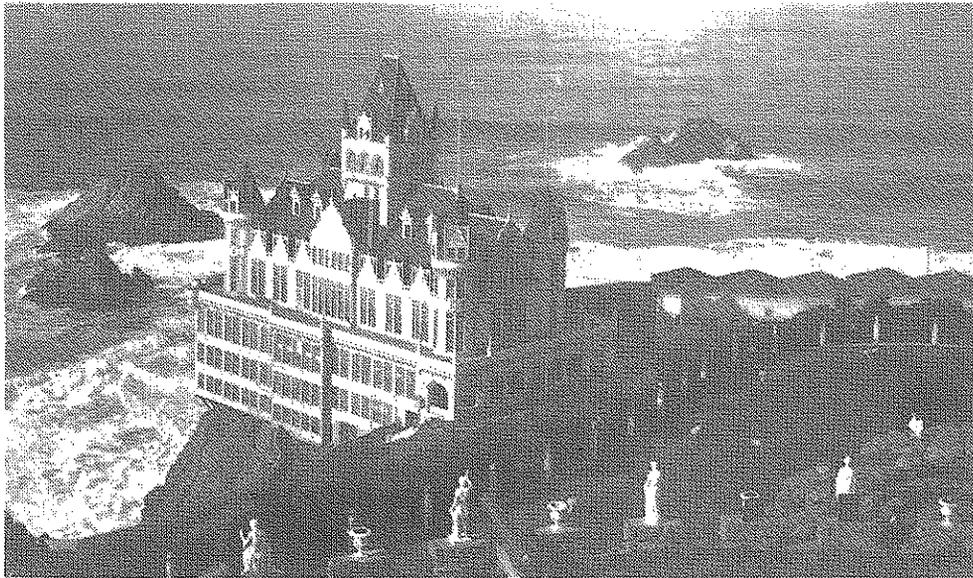
The main entrance to the baths from Point Lobos Avenue was a small classical structure in the form of a temple. The visitor descended a broad staircase to a museum gallery that overlooked the six salt water swimming tanks and one freshwater pool. Direct access to the swimming tank level was from another broad staircase that descended from the east. The tanks were of varying sizes; the largest was L-shaped and measured 275 feet along its length. The other pools were twenty-eight by seventy-five feet, with depths of two to six feet. All of the pools were heated to different temperatures by steam heat. Adjacent to the baths were bleachers for spectators that extended on three sides. The Baths also contained restaurants, galleries, and an amphitheater.

Following the death of Adolph Sutro, the Baths continued to operate as a swimming center until 1933. Attendance began to drop and revenues could no longer sustain the maintenance required to operate the system. The Baths were then converted to an ice skating rink in the 1950's until the property was sold in 1964 by Gustav Sutro, a grandson of Adolph Sutro. The new owners had devised plans to demolish the Baths and construct a 200 unit apartment complex overlooking the ocean. However, in June, 1966, in the

midst of negotiations regarding the development and with demolition already underway, a devastating fire destroyed the legendary Baths. The National Park Service acquired the site in 1982 as part of the Golden Gate National Recreation Area.

*Cliff House*

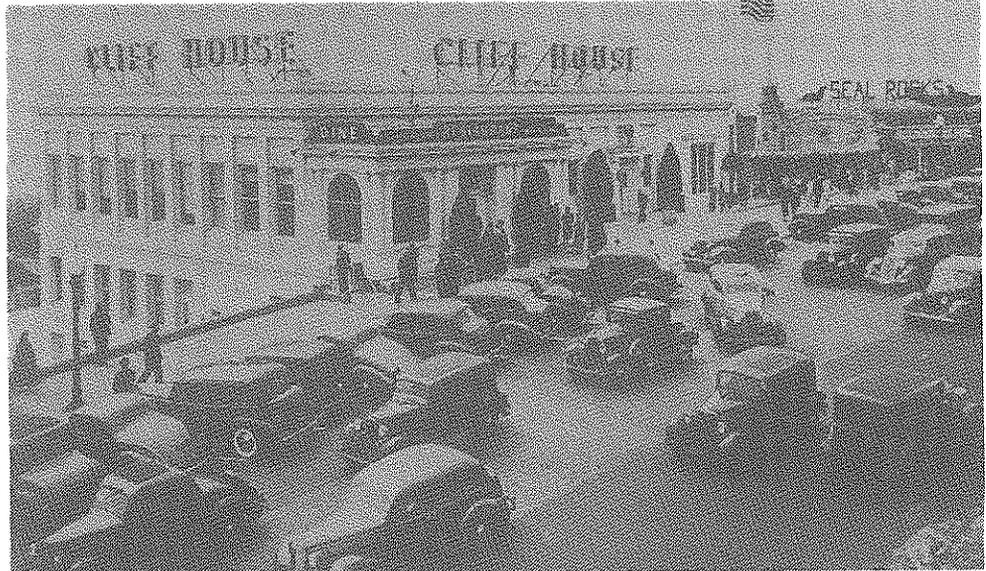
Adolph Sutro began an extensive remodeling campaign on the first Cliff House structure in 1883 and completed it within six years. In 1894, less than five years after completion of the remodeling, the first Cliff House burned to the ground. Sutro began immediate plans to design a second structure which was dedicated in February of 1896 along with the new Sutro Railroad that terminated close to the existing Louis' restaurant. Whereas the original Cliff House was simple in its design, the second structure resembled a "chateau style palace." The building was six-stories high and contained restaurants, private dining rooms, and a Camera Obscura. Unfortunately, in 1907, the second Cliff House also caught fire and burned to the ground.



*Second Cliff House*

Although it is often viewed with nostalgic longing today, the second Cliff House was not without its detractors, including the great city planner Daniel Burnham, who argued that the building was too large and ornate, and blocked sweeping views of the headlands to the north. In July, 1909, Emma Merritt opened the third Cliff House, a simple neo-classical building that was more in keeping with the scale of the first Cliff House. The operations of the establishment were successful, despite having to be closed for a period during World War I and several changes of ownership during the 1930s and 1950s. Several additions have been made to the building, including a small

wing on the north in 1939, and a new top floor and south wing addition in the 1950s. Changes to the street front elevation have been significant, completely disguising its neo-classical appearance. The building has shown little change since the NPS acquired the establishment in the early 1970s.



*Third Cliff House*

## 4.2 CULTURAL LANDSCAPE SETTING

Recognizing the need to balance historic values with those of the natural setting, the Design Proposal discussed in Chapter 2 integrates developments of the Sutro era with the demands that 21st century users will place on the site. The basis for recognizing what is significant from the Sutro era and what has integrity for interpretation is documented in the Cultural Landscape Report under the inventory of Surviving Character-Defining Features and Systems. Buildings/structures, historic circulation, small scale features, vegetation, view points, and topographic modifications are considered. These are illustrated in Figure 4-1. Examples of remnant elements would include the alignment route of the railroad, the concrete ruins of the Baths, the 1909 Cliff House structure, and the Parapet observatory at Sutro Heights. These character defining elements were the basis for the Design Proposal. The natural setting has evolved over time in response to the cultural setting, and is now the force responsible for slowly reversing the planned human impositions.

Recreational use will continue as a character-defining feature of the Sutro District, and landscape **rehabilitation** will be the appropriate design response. The Cultural Landscape Report states that rehabilitation encourages

**Figure 4-1**

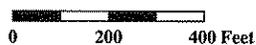
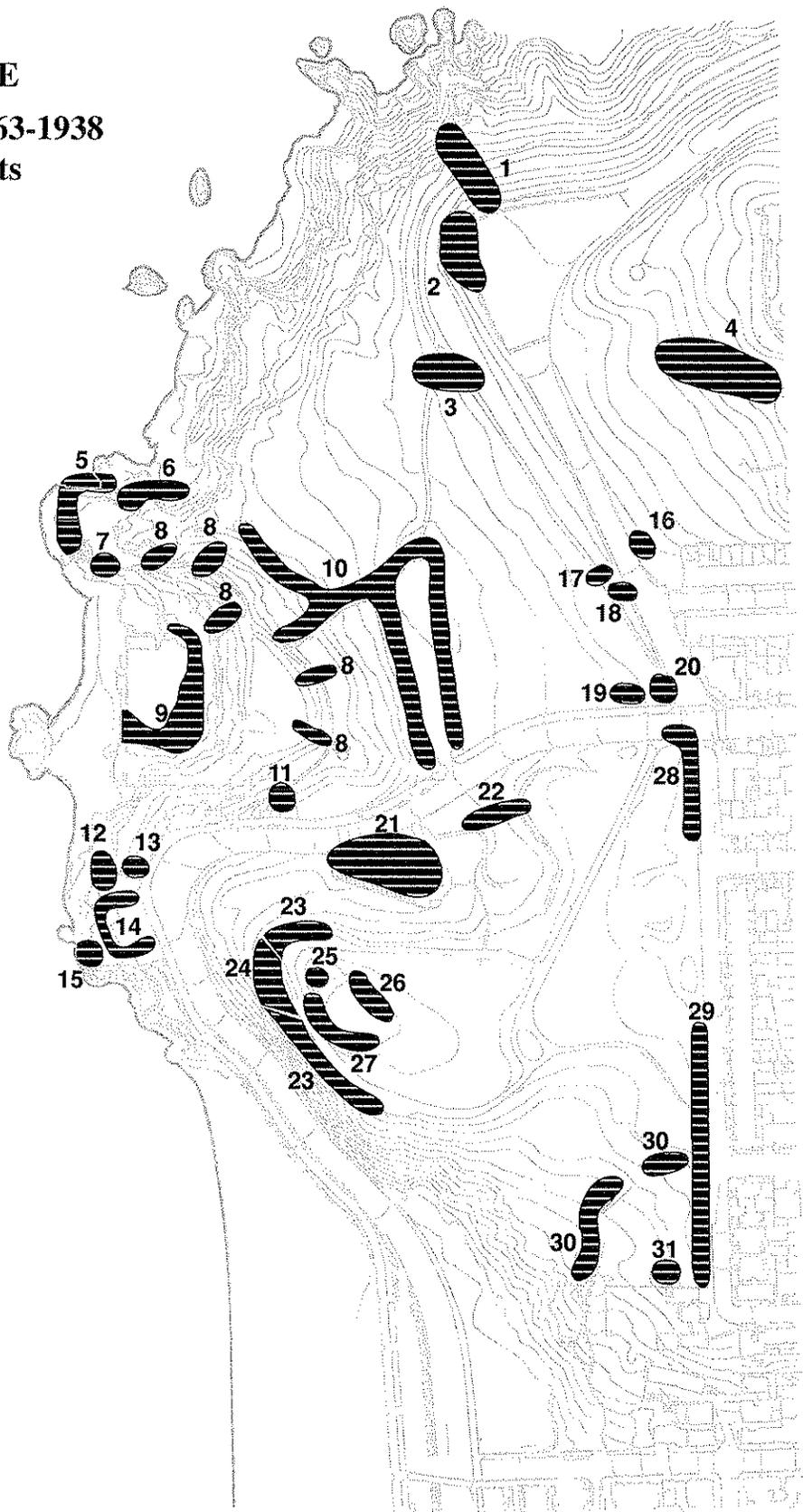
**CULTURAL LANDSCAPE**

**Period of Significance 1863-1938**

**Non-Contributing Elements**

**Excluding Vegetation**

1. Steps and Site Furniture
2. U.S.S. San Francisco Memorial
3. Paths
4. Road
5. Walls and Railings
6. Road
7. Overlook Structure
8. Drainage Structures
9. Sedimentation/Debris
10. Site Furniture and Pavement
11. Louis'
12. Sky Tram Building
13. Rest Rooms
14. Upper Terrace and Additions
15. Camera Obscura
16. Sign
17. Gate
18. Path
19. Bus Stop Structure
20. Sign
21. Parking
22. Path
23. Site Furniture and Fencing
24. Topography
25. World War II Structure
26. East End of Parapet
27. Site Furniture
28. Bus Stop Structure
29. Fence
30. Path
31. Utility Structure



improvements that make efficient contemporary uses possible while preserving those portions or features that are significant. Furthermore, new additions or alterations must not destroy features, materials, or physical or visual relationships that characterize the cultural landscape. New work is to be differentiated from the old and is to be compatible with the massing, size, scale, composition, and physical or visual relationships of the landscape's features to protect the integrity of the property. Additions or related new construction are to be undertaken in such a manner that, if removed in the future, the essential form and integrity of the cultural landscape would be unimpaired.

Contemporary facilities will not create the false historical impression that they existed in the same manner during the period of significance and they will be sited to prevent adverse impacts to character-defining, historic landscape features. It is also important to note that the site's significance today depends on the protection of its outstanding and vulnerable **natural** resources. Future design treatment should consider both biotic and built features as well as the ongoing dynamics of this coastal site.

The approach to Land's End from San Francisco has historically been one of striking views and an anticipation of the sight and sound of the Pacific surf. Sutro chose to bring visitors to the area on his railroad via California Street, around Point Lobos, and then to the Cliff House. The views of the Golden Gate, Marin Headlands, and the Pacific Ocean were undoubtedly spectacular due to the absence of tree cover. The historic alignment of the railroad is used today by hikers and joggers as they travel between the Merrie Way parking lot and Land's End.



*Remnant Concrete Seawall*

The present vehicular and public transit (MUNI) approach to the area is along Point Lobos Avenue and Geary Boulevard from the east and the Esplanade and Ocean Beach from the south (Figure 4-2). This was also the original site access. The view of the Ocean is apparent beginning around 42nd Street when arriving from the east, however, the sense of open space does not occur until the City grid ends at 48th and El Camino Del Mar.

The visitor to the area during Sutro's era found a landscape mostly void of buildings and trees. San Francisco was still developing around Market Street, and the City grid had not yet been extended to this area known as the "Outside Lands". Today, the City surrounds the District as evident in the development of the Richmond neighborhood westward to 48th Avenue and El Camino Del Mar. Residents of the Richmond District and other Bay Area neighborhoods use the open spaces of the Sutro District not only as a place to reflect on San Francisco history, but also as a place to experience nature, to exercise, and to find respite from urban sights and sounds. It is a significantly different attitude toward recreation than in Sutro's era where the visitor arrived at a place where a themed attraction was the primary reason for making the journey.

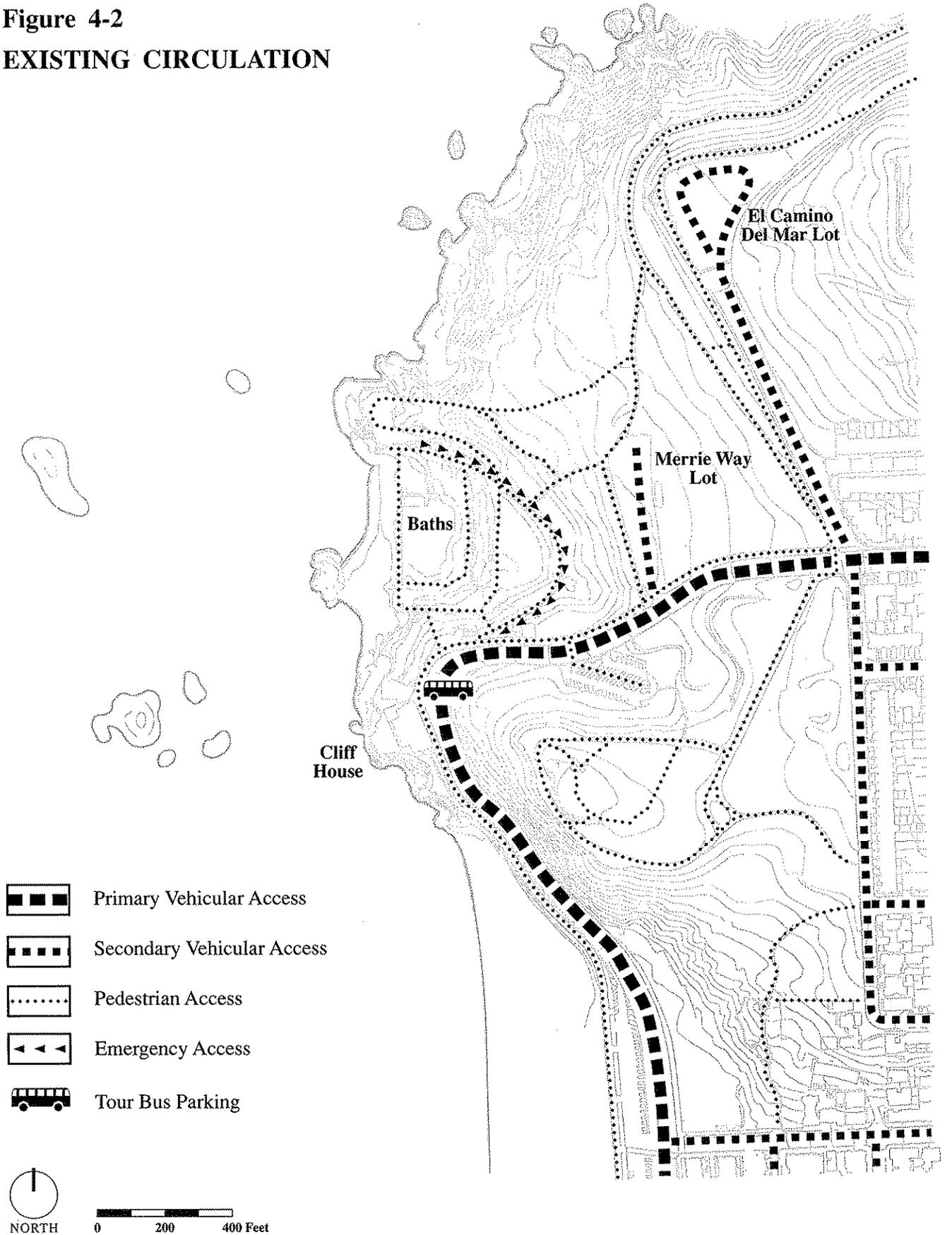
The historic vegetation within the District is dominated by dense stands of Monterey Cypress and Monterey Pine planted during the Sutro era. There is evidence that a collaboration existed between Sutro and officials from both the Presidio and Golden Gate Park on tree massing schemes to stabilize the shifting sand dunes. The area known as the Baths is now spatially confined by the mature forest of Cypress which covers most of the lands to the north and areas within Sutro Heights as well. The mature size of these trees gives the impression that the area was always under tree canopy, reestablishing the "sense of nature" in the City. Indeed, had the Cypress never been planted, the character and use of the District would be quite different than it is today.

## **4.2 NATURAL LANDSCAPE SETTING**

In addition to the Cultural Landscape Report, several specific studies were undertaken to assess the natural landscape setting the of District. These are summarized below and the full consultant reports are available in Volume 3 of this Comprehensive Design Plan.

There are four distinct zones within the Sutro Historic District: Point Lobos, Sutro Baths, Cliff House Area, and Sutro Heights. Together they comprise some of the most outstanding scenic resources in the Golden Gate National Recreation Area. The derelict Bath ruins, however, detract from the visual quality of the District. Opportunities to enhance the site's resources include

Figure 4-2  
EXISTING CIRCULATION



revegetating barren slopes, removing structures which block views and siting new structures so that they do not interfere with views.

***Point Lobos***

Lands included within this zone are in the northern portion of the District, east of the Merrie Way Parking lot and North of Point Lobos Avenue. The dominant vegetation type is the Monterey Cypress plantation that almost completely covers the area, particularly in the vicinity of El Camino Del Mar and the USS San Francisco Memorial. The Monterey Cypress were planted to control erosion of the sands along the coastal bluffs and to stabilize the margins of the bluffs. Tree cores taken from the plantations indicate the stands are about 75 years old. There is evidence of recent tree mortality within the stands, particularly along the western margins where tree roots have become exposed due to soil erosion. This problem is exacerbated by heavy pedestrian traffic along the coastal bluffs and the high wind and waves which occurred during the El Niño of 1983.

There is a small area of native vegetation consisting of a Northern Coastal Bluff Scrub Community near the intersection of Point Lobos Avenue and El Camino Del Mar (Figure 4-3). Vegetation near the bluffs overlooking the ocean is primarily ruderal (disturbed) shrubs and succulents which have found places to exist in the eroding soils. The cliff face within this zone is dangerous due to the continual erosion of the bluff tops and precipitous descent to the pounding surf below. There is one archaeological site within this zone listed in the Point Lobos Archaeological District. This is a small graded terrace containing remnant midden material that may be part of another site close by within the zone of Sutro Baths.



*Existing Vegetation Character*

### *Sutro Baths*

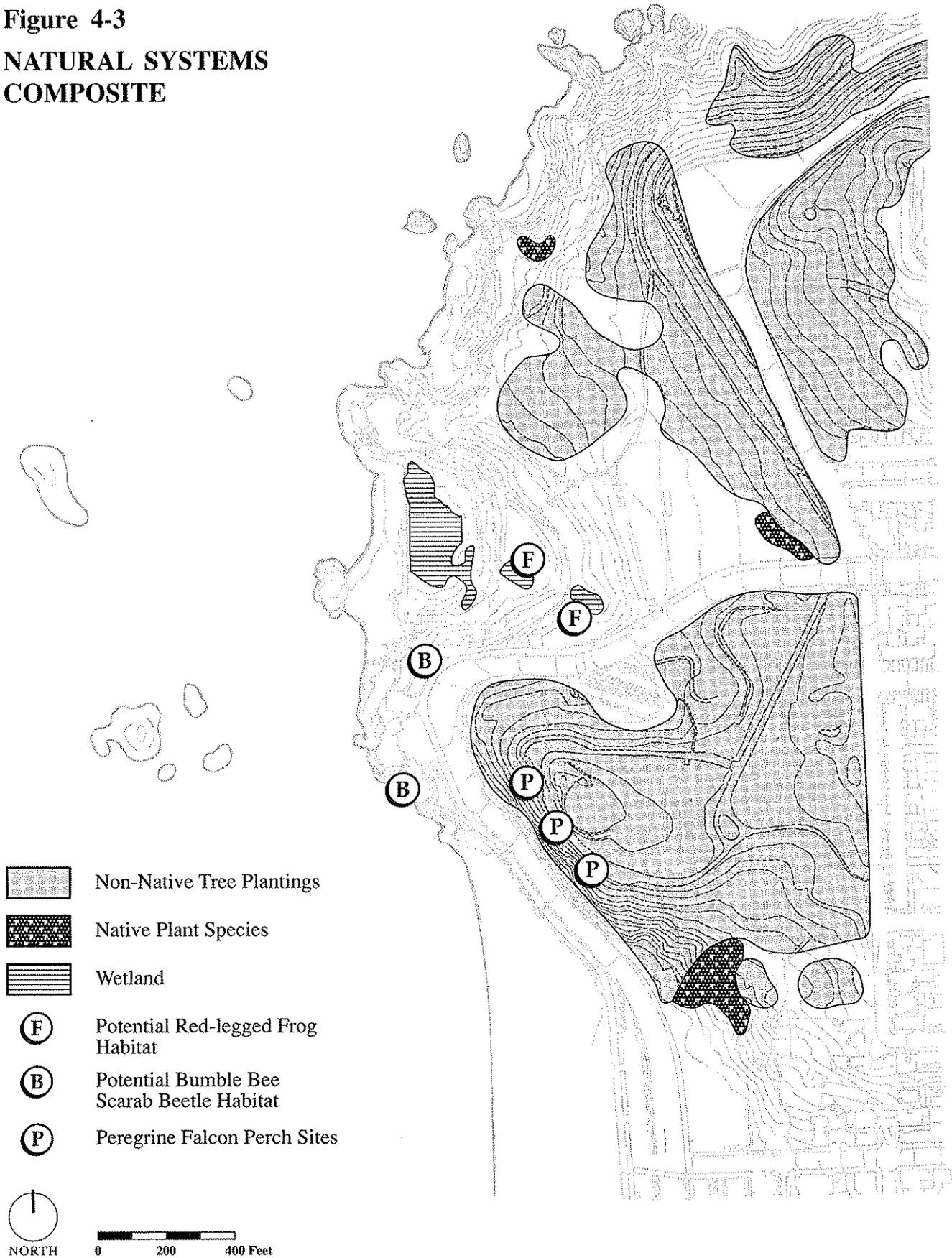
Located between the Cliff House and the promontory overlooking the waterworks is the distinctive landform created for the Baths. Also included within this zone is the Merrie Way parking lot to the east.

Without question, the Baths have undergone the most significant transformation with respect to changes in the natural terrain. Construction of the aquarium, and later the Sutro Baths, completely modified the original topography. Prior to Sutro's renovations as evident in historical photographs, a natural beach (Naiad Beach) occurred in this cove (page 5-2). In order to construct the enormous Baths complex, Sutro excavated large quantities of earth, the effects of which are strikingly visible in the bowl below the parking lot. Due to removal of much of the soil overlying the bedrock, severe erosion of the steep slopes has occurred over time. This is a concern that must be addressed with future construction and slope stabilization methods. In areas where old retaining walls still exist, erosion has been checked by allowing those structures to remain. There are small pockets of vegetation clinging to the exposed areas on the north and south facing slopes of the Baths. A mixed community of ruderal non-native shrubs has invaded the western facing slope with stands of *Albizia* as the dominant species.

There are several wetland marsh communities within the Sutro Baths zone (Figure 1). Two springs or seeps are evident in locations that Sutro used for freshwater holding ponds that fed the Baths and supplied windmill powered water to the Heights. Each marsh supports a complement of native and non-native plant communities. The seep that occurs higher on the slope is bordered by a stand of willows and is usually very wet due to the shallow water table. The larger seep that occurs downhill is fed from water moving through the site as it drains from the upper marsh. The lower marsh is overgrown with invasive species, particularly nasturtium and calla lily. Both marshes support soils and plants indicative of wetland conditions. Below this second marsh, water continues downhill to the base of the Baths, where a third marsh has formed that includes several plant species more tolerant of saline conditions. The higher elevations support rushes and silverweed, while the lower portions support more salt tolerant species such as salt grass and brass buttons. Another small seep is evident in the slope facing north just below the sidewalk along Point Lobos Avenue. Similar to the other seeps, this one supports nasturtium and calla lily.

The remnant baths are usually filled with several feet of brackish water and are considered wetlands under regulations within the National Wetland Inventory system as administered by the U.S. Fish and Wildlife Service. Based upon field observations and public testimony by the Audobon Society,

**Figure 4-3**  
**NATURAL SYSTEMS**  
**COMPOSITE**



the Baths are used by migratory waterfowl for bathing purposes and some feeding. The closest similar habitat for seabirds is found 4 miles south at Lake Merced. In addition, vegetation found in the seeps is used by songbirds for food and cover. As discussed in Section 6, the marshes are an important part of the interpretive story of the Baths site.



Local Resident

A wildlife resource evaluation was conducted for the area during the same period as the vegetation analysis. In addition to the bird species, common urban wildlife species such as raccoon, opossum and skunk are present. Sandy soils with ruderal (disturbed) vegetation around the Baths provide habitat for a colony of ground squirrels. The project area also includes rocky shoreline and intertidal habitats and offers unique opportunities for viewing marine mammals and seabirds. The Seal Rocks provide important roosting sites for brown pelicans, and haul-out areas for California sea lions and Stellar sea lions. Intertidal areas at Land's End and Fishermans Rock display sparse marine life because of water turbulence and high soil erosion, however anemones, mussels, limpets, and barnacles are found within the wave catch basin and walls of the waterworks.

The California Native Diversity Data Base (CNDDDB) San Francisco North quadrangle included two special status species that have been reported in or near the project area. The bumblebee scarab beetle (*Lichnanthe ursina*), a federal category 2 candidate, has been found in the dunes below the Cliff House (CDNNB 1992). The California red-legged frog (*Rana aurora draytoni*), a federal category 2 candidate and California species of special concern, has been reported from several locations in Golden Gate Park and Land's End (CNNDDB 1992). There have been no frogs sighted within the project area seeps because they are probably too shallow and highly disturbed to represent good frog habitat.

The American peregrine falcon (*Falco peregrinus*), a federal and state endangered species, has been documented in Sutro Heights Park (Fish 1989). A peregrine was observed perched on a snag above the artificial cliff on several occasions during November of 1989.

Evidence of pre-historic use of the site is available but not extensively documented. Two archaeological sites were recorded in the Sutro Baths zone as part of the Point Lobos Archaeological District. An archaeological deposit was found in the slope under the historic entrance to the Sutro Baths. Molluscan remains include mussel, clam, oyster, limpet, and chiton. In addition, fire cracked rock, charcoal and ash were found. A second site was found within the Sutro Baths zone, within the slope to the north of the Baths. This large midden site contains remains of mussel shells and bones of sea lion, deer and sea otter. These sites are significant because they are very likely the last

remaining visible evidence of the occupancy of the region by pre-European contact native Californians. All archaeological sites will be respected during the construction process, pending additional assessment and documentation.

### *Cliff House*

The small zone around the Cliff House site includes the area directly adjacent to the North Annex building and south to the sea wall along the Esplanade. This area has been modified greatly over time and contains little vegetation or other natural features other than the exposed cliff faces to the Pacific Ocean. However, the comments noted above in relation to the scarab beetle apply to this area as well.

### *Sutro Heights Park*

The Sutro Heights zone is bounded by Point Lobos Avenue to the north and west, 48th Avenue to the east, and steep cliff faces and Parcel 4 to the south. Tree massing in the Park is mixed, reflecting the arboretum like plantings of the Sutro era. The main axis into the park (Palm Avenue) was once completely lined with palm-like *Dracena draco* trees, of which only a few remain.

Tree and shrub plantings have long since overgrown their sites due to the lack of maintenance. The gardens are no longer visible and have been replaced with lawn and ground cover beds. Current maintenance procedures include pruning and removing trees for safety and appearance and removing undergrowth where possible. Intermittent groupings of trees from the Sutro era are still recognizable, including several Norfolk Island pines.

The Sutro Meadows, to the south of Sutro Heights has a mixed vegetative cover of Cypress, ruderal shrubs and succulents, non-native grasslands, and sand dune communities. The sand dune communities have been relatively undisturbed, and include both the Northern Foredune and Central Dune Scrub Communities.

## **4.3 ECONOMIC SETTING**

In addition to analyzing the cultural and natural resources, the current economic and fiscal condition associated with the concessioners was assessed. Indications from the data collected are that the Cliff House Complex has reached a mature stage in the evolution of visitor destination with attendance leveling off and figures no longer growing rapidly. Annual visitation to the area is fluctuating between 1 and 1.5 million people, peaking in the summer tourist season. Weekend visitation is roughly three times greater than week-day visitation based upon an analysis of traffic data.



*Cliff House*



*Musée Mécanique*

The Cliff House/Sutro District attracts a wide range of visitors. They range from local nature enthusiasts who may spend a half day hiking and picnicking along the trails past the ruins, to old timers who bring friends and relatives for a seafood dinner at the Cliff House, to tourists brought by busses for quick ten minute edge-of-the world experiences. Interviews with the Cliff House operator indicate that at least 70 percent of their year round patrons are local residents. Tourists brought to the area by busses are not permitted the time to engage in a long lunch at one of the several Cliff House restaurants.

The Cliff House/Sutro District is an important source of revenue for the Park. Recognizing that the District has the potential to continue providing a source of capital for future construction and maintenance, the continued operation of concessions is considered extremely important. Existing concessions operations are under interim authorizations. The opportunity exists for creative reconfiguring of the type and mix of establishments desired. The type of tenant and quality of product can be reestablished when new contracts are created.

Retaining some form of concession and/or amusement activity is also compatible with the history and cultural significance of the site. The Musée Mécanique and Camera Obscura have entertained visitors for many years and represent the last vestige of turn of the century attractions now that Playland-at-the-Beach has been demolished.

#### **4.4 TRAFFIC AND PARKING**

The January 1992 parking occupancy survey counted 313 off street vehicles (in the Point Lobos, Merrie Way and USS San Francisco Memorial Lots) and 218 on street vehicles (along Point Lobos from Balboa Street south of the Cliff House to 48th Avenue and along El Camino Del Mar), for a total of 531 parked vehicles. Of the on street vehicles, 40 were estimated to be non-Sutro related. Because this survey was taken at 3:00 p.m. on a weekend day during the winter, the total count was factored up by 30 percent to convert demand figures to a high tourist season (summer) condition. This resulted in a current high season demand for 622 spaces.

It is reasonable to assume that some increase in parking demand would result from the proposed project if it were to be developed all at one time, which is not the case; due to financial and environmental constraints the project will most likely be developed incrementally. Nonetheless, similar projects (Monterey Bay Aquarium, for example) have experienced a surge in visitation for a few years, with visitation returning to normal average conditions

after the “novelty” of the attraction has diminished. This is a very speculative situation and it is not possible at this time to predict what the future attraction of the site will be compared to the existing site and just how many additional visitors, if any, the Sutro Historic District will attract in the future. It is not certain that visitor numbers will increase substantially in the future, and therefore parking may remain as it is today. During the high tourist season it is possible that weekend parking demand will exceed available supply. Mitigation measures listed in the Plan are designed to address that condition.

Projected visitor counts and resultant traffic volumes will be based upon (1) a more specific program for the Cliff House and Visitor Center (which is beyond the scope of this Plan) and (2) on the visitor and traffic management “policy” established by the NPS. If the Park Service were to design for the maximum possible visitation, the very resource people come to experience would be seriously compromised.