Presidio Trust Management Plan
Main Post Update

Final Supplemental Environmental Impact Statement

THE PRESIDIO TRUST
NOVEMBER 2010

"As part of the Golden Gate National Recreation Area, the Presidio's significant natural, historic, scenic, cultural and recreational resources must be managed in a manner which is consistent with sound principles of land use planning and management, and which protects the Presidio from development and uses which would destroy the scenic beauty and historic and natural character of the area and cultural and recreational resources."

FROM THE PRESIDIO TRUST ACT (P.L.104-333)

Presidio Trust Management Plan
Main Post Update
Final Supplemental Environmental Impact Statement
The Presidio of San Francisco, CA

This document provides new analysis, information, and changes made in response to public comments on the draft supplemental environmental impact statement (SEIS) and supplement to the draft SEIS (supplement) for the Main Post Update to the Presidio Trust Management Plan (PTMP). The document, together with the accompanying Response to Comments, will be filed as the final SEIS.

Lead Agency

The Presidio Trust (Trust), a federal government corporation and executive branch agency created by Congress in 1996, is the lead agency for the action analyzed in the final SEIS under the National Environmental Policy Act (NEPA). The Trust oversees the interior 1,168 acres (Area B) of the Presidio of San Francisco (Presidio), while the National Park Service manages the 323 coastal acres (Area A) of the former military post. The Trust must preserve and enhance the Presidio as an enduring resource for the American people and be financially self-sufficient by 2013.

Abstract

The purpose of the Main Post Update is to implement the Presidio Trust Management Plan (PTMP) vision of the Main Post as the heart of the Presidio, to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible when the PTMP was completed in 2002. In order to realize the PTMP vision of the Main Post, the Main Post Update responds to new opportunities and proposes a number of actions that the Trust intends to pursue. These actions include a free-standing lodge on and south of the Building 34 site, an addition to the Presidio Theatre (Building 99), an addition to the Presidio Chapel (Building 130), and an addition to link Buildings 47 and 48 and provide an entrance for the Presidio Archaeology Center's archaeology lab and curation facilities. The Trust seeks to accomplish the following objectives through the proposed actions: reveal the Presidio's history, welcome the public, and employ 21st century green practices.

Next Steps

The Trust will circulate the final SEIS for at least 30 days before making a decision on a final course of action. Although there is no requirement for the Trust to respond to comments received on the final SEIS, the Trust will consider all comments received during the 30-day wait period. The Trust will determine whether the final SEIS meets the standards for EIS adequacy under the NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations, and its own NEPA regulations, and will reach a decision on the action in a Record of Decision (ROD). The ROD will be a written public record explaining why the Trust has taken a particular course of action and will enable the Trust to move forward to implement the final action.

For More Information Contact

John Pelka, Presidio Trust, 34 Graham Street, P.O. Box 29052, San Francisco, CA 94129-0052, 415/561-4183 (phone).

Presidio Trust Management Plan
Main Post Update

Final Supplemental Environmental Impact Statement

TABLE OF CONTENTS

Cover Sheet

Summary S-1

Purpose and Need 1

1.1 Statement of Purpose and Need 1
1.2 Objectives of Main Post Update 2
1.3 Purpose and Contents of Supplemental Environmental Impact Statement 6

Alternatives 13

2.1 Alternative 1: PTMP Visitor and Community Center 13
2.2 Alternative 2: Main Post Update (Mitigated Preferred Alternative) 21
2.3 Alternative 3: History Center 28
2.4 Alternative 4: Status Quo 31
2.5 Other Alternatives 37

Affected Environment and Environmental Consequences 41

3.1 Land Use 41
3.2 Land Use Plans and Policies 49
3.3 Transportation and Parking 54
3.4 Air Quality 96
3.5 Noise 107
3.6 Historic Resources 114
3.7 Archaeology 139
3.8 Visua1 Resources 159
3.9 Visitation 183
3.10 Recreation 191

3.11 Water Resources 194
3.12 Cumulative Impacts 203
3.13 Other Impacts 223

Public Involvement and Agency Consultation 233

4.1 Public Participation 233
4.2 Consultation under the National Historic Preservation Act 238

Report Preparers / Persons Contacted / SEIS Distribution 241

5.1 List of Preparers 241
5.2 List of Persons Consulted 243
5.3 List of Agencies and Organizations 244

Acronyms and Abbreviations 247

Glossary 249

Index 261

Appendices

A Transportation Data

B Programmatic Agreement for the Main Post Update

C Post Construction Stormwater Best Management Practices

Tables

1 Alternatives Including the Mitigated Preffered Alternative S-3
2 Coordinating the National Environmental Policy Act with the National Historic Preservation Act for the Main Post Update 9
3 Comparison of Alternatives 14
4 Presidio Gateways Traffic Volume Summary 56
5 Existing (Year 2008) Intersection Operating Conditions 60
6 Nearby Muni Transit Lines 63
7 Parking Supply and Current Use within the Main Post 64
8 Person Trip Generation Rates by Land Use 66
9 Main Post Trip Generation by Mode of Travel and by Alternative 70
10 Main Post Composite Mode Share and Vehicle Occupancy Rate by Alternative 72
11 Parking Demand by Alternative 73
12 Year 2030 AM Peak Hour Levels of Service 75
13 Year 2030 PM Peak Hour Levels of Service 76
14 Comparison of Factors Used in Evaluating the Relative Significance of Transportation Impacts at Unsignalized Intersections 77
15 Intersections Operating at LOS E or F by Alternative 78
16 Main Post Parking Supply by Alternative 82
17 Comparison of Main Post Weekday Parking Demand and Supply by Alternative 83
18 Muni Transit Effectiveness Project Proposed Service Changes 85
19 Presidio-Wide Transit Ridership (Number of Trips) by Transit Provider and by Alternative 87
20 Intersection Mitigation Measures by Alternative 90
21 Unmitigated and Mitigated Levels of Service 91
22 Estimated Average Weekday Emissions from Vehicle Trips and Area Sources By Alternative 101
23 FHWA Noise Abatement Criteria 108
24 Summary of Short-Term Noise Measurements 109
25 Historic Archaeological Features within the Main Post that Contribute to the NHLD 144
26 Annual Visitation to the Main Post 184
27 Changes in Impervious Area within the Main Post 198
28 Changes in Stormwater Runoff Within the Main Post 199

Figures

1 Alternative 1: PTMP Visitor and Community Center 16
2 Alternative 1: New Construction and Building Demolition 19
3 Alternative 1: Circulation and Parking 22
4 Alternative 2: Main Post Update 23
5 Alternative 2: New Construction and Building Demolition 26
6 Alternative 2: Circulation and Parking 29
7 Alternative 3: History Center 30
8 Alternative 3: New Construction and Building Demolition 32
9 Alternative 3: Circulation and Parking 33
10 Alternative 4: Status Quo 35
11 Alternative 4: New Construction and Building Demolition 36
12 Alternative 4: Circulation and Parking 38
13 Existing Building Use 43
14 Study Intersections 57
15 Area of Potential Effects 115
16 Changes to the Landscape Since 1994 123
17 Changes to the Built Environment Since 1994 124
18 Identified Archaeological Features 1993 NHLD 141
19 Identified Archaeological Features 2008 NHLD Draft 142
20 Cut/Fill Map with Locations of Archaeological Testing 148
21 South of the Main Parade Site Sections and Cores 149
22 Key Map of Views 163
23 Alternative 1: View from North End of Old Parade Looking South 164
24 Alternative 1: View from Porch of Building 210 Looking South 166
25 Alternative 1: View from Building 50 Looking Northwest 167
26 Alternative 1: View from Building 102 Looking Southeast 168
27 Alternative 1: View from Moraga Street Looking Northeast 169
28 Alternative 1: View from Fisher Loop Looking Southwest 171
29 Alternative 2: View from Pershing Square Looking Southeast 172
30 Alternative 2: View from North End of Old Parade Looking South 173

31 Alternative 2: View from Porch of Building 210 Looking South 175
32 Alternative 2: View from Building 102 Looking Southeast 176
33 Alternative 2: View from Building 50 Looking Northwest 177
34 Alternative 3: View from Porch of Building 210 Looking South 179
35 Alternative 3: View from Building 102 Looking Southeast 180
36 Alternative 3: View from Building 50 Looking Northwest 181
37 Cumulative Actions 204

Summary

This section includes a summary of the underlying purpose and need for the Main Post Update to the Presidio Trust Management Plan (Alternative 2 or mitigated preferred alternative), a summary description of the mitigated preferred alternative and other alternatives considered, areas of controversy (including issues raised by agencies and the public), major conclusions, issues to be resolved, and next steps.

Note: This summary should not be relied upon for a thorough understanding of the alternatives, including the mitigated preferred alternative, or their potential environmental impacts. Refer to Section 1 for a more complete description of the purpose and need, Section 2 for a more complete description of the mitigated preferred and other alternatives, Section 3 for a more complete discussion of the environmental impacts of the alternatives and proposed mitigation measures, and Section 4 for a discussion of public involvement and agency consultation prior to circulation of the final SEIS.

Need for Main Post Update

The Trust intends to implement the Presidio Trust Management Plan (PTMP) vision of the Main Post as the heart of the Presidio, to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible when the PTMP was completed in 2002. The Main Post Update is needed because, while a community is growing in the Main Post and visitation has increased, the Main Post has not yet become the "focal point for visitor orientation" and "lively pedestrian district" contemplated in the PTMP. In order to realize the PTMP vision of the Main Post, the Trust is taking advantage of new opportunities and is proposing several actions. These actions include a free-standing lodge to replace Building 34 and occupy more of the site south of Building 34, an addition to the Presidio Theatre (Building 99), an addition to the Presidio Chapel (Building 130), and an addition to link Buildings 47 and 48 in order to provide a climate-controlled entrance for the lab and curation facilities for the Presidio Archaeology Center. The Trust will use the following strategies in undertaking these actions and achieving the vision of the Main Post: reveal and elevate the Presidio's history, welcome the public, and employ 21st century green practices for both historic preservation and park management.

Modifications to the Preferred Alternative

The updated planning concept for the Main Post was initially evaluated as the proposed action (Alternative 2) in a draft supplemental EIS (SEIS) that was filed on June 13, 2008[1] under the provisions of the National Environmental Policy Act (NEPA). The proposed action in the draft SEIS reflected the proposals as they were presented to the Trust. The Trust then identified a preferred alternative, which was the subject of a supplement to the draft SEIS, filed on March 6, 2009.[2] The preferred alternative emerged

[1] *73 FR 33814.*
[2] *74 FR 9817-9818.*

from the Trust's analysis of the proposals and considered public comment on the draft SEIS and consultation to date under Section 106 of the National Historic Preservation Act (NHPA). The Trust then assessed comments received on the supplement, initiated further consultation under Section 106, and developed the mitigated preferred alternative, which is being evaluated in the final SEIS and is the undertaking under the terms of a Programmatic Agreement for the Main Post Update (Appendix B). The following key changes have been made to the proposed action since the release of the draft SEIS and supplement and have been incorporated into the mitigated preferred alternative:

- The museum of contemporary art (CAMP) has been withdrawn from further consideration, and Building 93 (currently the Presidio Bowling Center) would be retained and renovated for another public use. Building 97 would be retained in its current location and would be reused for a public purpose. The tennis court adjacent to the Presidio Bowling Center would remain for active recreational use.
- New construction has been reduced from 265,000 square feet to 147,000 square feet, resulting in less development (maximum building area) than previously foreseen in the PTMP.
- New construction for the Presidio Lodge has been reduced in size to a maximum of 70,000 square feet. New construction would be broken into separate, smaller buildings to resemble the historic pattern of development on the site.
- The Presidio Theatre (Building 99) would be retained as a single auditorium, and new construction, not to exceed 18,000 square feet, would include a transparent connector.
- Parking on the archaeological site of El Presidio would be initially reduced from 252 daily spaces to 75 daily spaces and would ultimately be removed. Removal or relocation of Buildings 40 and 41 from El Presidio would be subject to further consultation under Section 106 of the NHPA.
- New construction at the Presidio Archaeology Center has been reduced from 680 square feet to a maximum of 500 square feet.
- Historic or National Register-eligible Buildings 113, 118, and 386, previously planned for removal in order to expand parking, would be retained.
- The addition to the Presidio Chapel has been reoriented so that it is separated from the primary façade; the amount of allowable square footage has been increased from 3,000 square feet to a maximum of 4,000 square feet.

Alternatives Including the Mitigated Preferred Alternative

The final SEIS evaluates four alternatives, including the mitigated preferred alternative (Alternative 2: Main Post Update or Alternative 2), which were developed and modified with the benefit of public input. The alternatives propose different building uses; different amounts of demolition, maximum new construction, and total building areas; and different parking and circulation improvements for the Main Post. The alternatives are summarized in Table 1 and briefly described below.

1 ALTERNATIVES INCLUDING THE MITIGATED PREFFERED ALTERNATIVE

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
EXISTING TOTAL BUILDING AREA (square feet)	1,148,000	1,148,000	1,148,000	1,148,000
MAXIMUM BUILDING AREA (square feet)	1,214,500	1,201,000	1,161,000	1,140,000
MAXIMUM DEMOLITION (square feet)	44,000	94,000	64,000	34,000
MAXIMUM NEW CONSTRUCTION (square feet)	110,000	146,500	77,000	26,000
VISITOR-SERVING USES (square feet)	503,000	576,000	464,000	393,000
ANNUAL VISITORS (millions)	1.38-1.57	1.43-1.69	1.22-1.40	1.11-1.27
PARKING SPACES	1,892	1,910	1,892	1,852
PROPOSED PUBLIC USES	Heritage Center in Building 2 / Visitor Center in Building 50	Heritage Center in a portion of Building 50	Visitor Center in a portion of Building 50	Visitor Center in a portion of Building 50
	Bowling Center in Building 93	Public uses in Building 93 at site south of the Main Parade	History Center at site south of the Main Parade	Bowling Center in Building 93
	Presidio Theatre and addition (Building 99)	Presidio Theatre and addition	Presidio Theatre with no addition	Presidio Theatre leased out for the highest and best use or mothballed
	Presidio Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Presidio Archaeology Center in Buildings 44, 47, 48 (with addition), and 49	Presidio Archaeology Center at Buildings 44, 47, 48, and 49 without addition	Presidio Archaeology Center buildings leased out for the highest and best use or mothballed

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
	Excavation and commemoration of El Presidio with Buildings 40 and 41 and parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and limited parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and no parking	Limited excavation and commemoration of El Presidio and parking
	Lodging in Pershing Hall (Building 42) and dormitory rooms for visitors in Buildings 40 and 41	Lodging in Pershing Hall and at Building 34 site	Lodging in Pershing Hall and B&Bs in upper Funston Avenue Officers' Quarters (Buildings 11-16)	Residences in Pershing Hall and dormitory rooms for visitors in Buildings 40 and 41
	Presidio Chapel and addition	Presidio Chapel and addition	Presidio Chapel with no addition	Presidio Chapel with no addition

ALTERNATIVE 1: PTMP VISITOR AND COMMUNITY CENTER

Under this alternative, the Main Post would remain the heart of the Presidio as described in the PTMP. The district would be a focal point for visitor orientation and a community center where people live, work, and enjoy themselves. The Main Post's rich collection of historic buildings and landscapes would be the backdrop for visitor programs and a setting for businesses, organizations, and Presidio community services. Significant open spaces would be preserved and restored.

ALTERNATIVE 2: MAIN POST UPDATE

Alternative 2 shares the same vision as Alternative 1 for the Main Post to be the heart of the Presidio. The Main Post would be a welcoming place that serves the community, with the Presidio's history visible and interpreted, and with 21st century green practices used to conserve energy and resources and to rehabilitate its buildings. Archaeological excavation of El Presidio would unlock the history of the Presidio's founding; landscape treatment would reflect the structure of the buried site and outline the open space of the original *plaza de armas*. A Heritage Center in the nearby Officers' Club would offer opportunities to explore the history of the Presidio and the American West and would house the education facilities of the Archaeology Center. The new Presidio Lodge would welcome visitors and animate the Main Parade.

ALTERNATIVE 3: HISTORY CENTER

Alternative 3 is based on a proposal from the Presidio Historical Association. A new History Center at the site south of the Main Parade would be the primary interpretive facility, serving as both "an anchor and a portal" to receive and orient visitors to the historic Main Post. Preference would be given to those uses that perpetuate the Presidio's

military legacy and tradition, provide opportunities for joint resource preservation programs, and/or enrich educational and other program elements. Tenants would be selected over the long term based on their ability to support park programs and activities and retain the district's sense of community and the past.

ALTERNATIVE 4: STATUS QUO

Under this alternative, no significant park enhancements or physical change beyond that already permitted or underway would occur in the district, i.e., there would be no further building demolition or new construction, and existing buildings and activities would remain. Buildings would be rehabilitated to meet essential code requirements, consistent with the Secretary of the Interior's Standards, and then leased out for the highest and best use (generally mixed-use office). Tenants that could help fund the preservation and enhancement of the Presidio's resources and meet the community service needs of the park's visitors, tenants, and residents would be sought.

Areas of Controversy

The proposal for a museum of contemporary art (CAMP), withdrawn from further consideration in the final SEIS, had received widespread media attention and excited considerable controversy. Other issues have also been raised during circulation of the draft SEIS and supplement. Whether or not they are considered environmentally significant effects themselves, the following issues have generated interest and debate:

- Departure from the 2002 PTMP for the Main Post district (i.e., increasing amount of demolition and new construction)
- New construction for a freestanding lodge on the Main Post
- Removal of historic Buildings 40 and 41 to commemorate El Presidio
- Increase in visitation to the Main Post and potential for increased traffic and parking demand

Major Conclusions

LAND USE

All alternatives being considered would result in less building area than envisioned in the PTMP. In general, key changes in land or building uses under each alternative, including the proposed Presidio Lodge in Alternative 2 and the proposed History Center in Alternative 3, would change the general density and character of land use within affected portions of the Main Post and substantially intensify current activity levels on the sites. However, consistency with PTMP planning policies and guidelines for buildings and structures, as well as with site-specific project parameters established in the Main Post Update, including limits on building heights and new construction, would ensure compatibility of new construction with the character of adjacent buildings. Surrounding uses and activities would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed uses. Changes to building and land use under Alternative 2 would generally be from office and residential to public-serving, which

would increase visitor services and activities, contribute to the mixed-use district, and enhance the Main Post as a destination for park visitors. No conflicts with adjacent building or land uses are expected.

CONSISTENCY WITH THE PRESIDIO TRUST MANAGEMENT PLAN

The PTMP is the Trust's formally adopted statement of land use policy. It provides planning principles and policies that, taken together, guide the Trust's decision-making and actions. The PTMP was intended to be programmatic, rather than prescriptive, to allow consideration of alternative or changed uses, when appropriate.

Alternative 1 reflects the Final Plan Alternative analyzed in the final PTMP EIS, and therefore is consistent with the planning concept and planning guidelines described in the PTMP for the Main Post.

The freestanding Presidio Lodge proposed in Alternative 2 would be inconsistent with the PTMP vision that historic buildings would be used for overnight accommodations, and that public uses would be located mainly in existing structures. Also under Alternative 2, loss of bowling in Building 93 would be inconsistent with the PTMP's commitment to retain facilities for active recreational use. However, the PTMP acknowledges that recreational facilities may be removed or relocated.

Construction of the History Center at the site south of the Main Parade would not be consistent with PTMP objectives that new construction on the Main Post reinforce historic patterns of spatial organization and complement the rehabilitation of adjacent historic buildings. The new construction would also be inconsistent with the PTMP commitment to locate public uses mainly in existing structures. Demolition of the Presidio Bowling Center and adjacent tennis court as required for the History Center would be inconsistent with the PTMP's commitment to retain facilities for active recreational use.

Alternative 4 would only minimally advance the PTMP goal to bring people to the park, as the limited visitor-serving uses and other amenities would not make the park a welcoming place for visitors. Should buildings not be filled and infrastructure systems not be improved, this alternative also would not attain the PTMP goal to preserve and enhance park resources, nor support the PTMP's requirement to provide for the Presidio's long-term management and care.

TRANSPORTATION AND PARKING

Traffic in the Presidio is affected by projects inside the park, as well as trends in regional traffic patterns. Despite the development at the Letterman Digital Arts Center and general growth in the Presidio's population (most of its housing is occupied and about two-thirds of the building space in the Main Post is occupied), total traffic volumes through the nearby gates during the peak commute periods have not changed appreciably over the past eight years. Total PM peak hour gate counts in October 2005 were only slightly higher than those collected in 2000. After adjustments to account for seasonal variation, PM peak hour gate counts in January 2008 were comparable to those collected in October 2005. Traffic counts collected in March 2009 suggest that traffic volumes at the Presidio gates have begun to increase more recently. The increase between January 2008 and March 2009 is likely due to a combination of seasonal variation and increased activity in and near the Presidio.

Alternative 2 would generate 3 percent more traffic to/from the Presidio than anticipated in the final PTMP EIS. Nevertheless, key intersections are expected to operate similarly. All but two of the study intersections that are expected to operate at level of service (LOS) E or F could be mitigated to LOS D or better with implementation of the mitigation measures identified in the final PTMP EIS. The Trust, however, would not install traffic lights in the Main Post because of the potential detriment to its historic character.

Only about one-half of the 2,200 existing parking spaces on the Main Post are currently used on any given weekday. The need for parking would increase with any alternative, and would be similar under each alternative. Alternative 2 would include approximately 1,900 parking spaces. Through the use of parking permits, time restrictions, and paid parking, parking would be managed to reduce demand. The most convenient and proximate parking would be managed for visitors. Employees parking for a longer duration would use more remote parking areas and would have to walk 5 to 10 minutes to their workplace.

Ridership on the PresidiGo downtown shuttle continues to increase, and capacity has been added to keep pace with demand. Demand for Muni and Golden Gate Transit services would also increase in coming years. As Muni undertakes systemic changes as part of the Transit Effectiveness Project, the Trust would work with Muni to maintain transit service in the Presidio and improve connections between PresidiGo and Muni.

AIR QUALITY

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for managing compliance with the ambient air quality standards. The State Implementation Plan (SIP) and the Clean Air Plan (CAP) identify the steps that must be taken to attain and maintain the state and federal standards, and local jurisdictions can cooperate with these efforts by implementing transportation control measures to reduce emissions from motor vehicles. The Trust's transportation demand management (TDM) program implements the relevant transportation control measures consistent with these plans.

With mitigation, none of the alternatives is expected to substantially increase vehicle emissions or emissions of other air pollutants, or generate significant nuisance dust or odors. Alternatives 1, 2, and 3 would temporarily affect air quality because of demolition and construction activities. No notable stationary sources of air emissions would be within the Main Post district, other than small heaters or boilers that are exempt from permitting requirements. Emissions from motor vehicle trips for development under all alternatives would be adequately reduced by maintaining consistency with the regional Clean Air Plan (CAP). Continued implementation of the Trust's TDM program would ensure consistency with the CAP, and conformity with the SIP would be ensured because of the relatively small scale of the proposed demolition and construction activities.

Tenants within the Main Post may be sensitive to air quality impacts during construction and demolition activities. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would limit adverse effects during demolition and construction activities, and

additional U.S. Environmental Protection Agency-recommended measures would control construction equipment exhaust.

Global climate change is influenced by greenhouse gas (GHG) emissions, including carbon dioxide (CO_2), which occurs with combustion of fossil fuels. The state has identified strategies for managing GHG emissions in California. The Trust would meet state climate change emission reduction targets and would collect emissions data under a voluntary reporting program. To accomplish this, the Trust would develop an inventory of park-based GHG emissions, identify and implement sustainable strategies to mitigate these emissions and adapt to climate change impacts, and educate the public about these efforts. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons of direct CO_2-equivalent GHG emissions per year.

NOISE

The Main Post is exposed to existing traffic noise, most notably within 200 feet of U.S. Highway 101 (Doyle Drive), where levels are commonly above 67 dBA (A-weighted decibels). These existing levels exceed the Federal Highway Administration (FHWA) Noise Abatement Criterion for recreational areas, parks, residences, hotels, and schools. Additionally, noise levels above 67 dBA occasionally occur adjacent to some of the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard).

Noise caused by construction/demolition and increased traffic noise on the Main Post under all alternatives would not exceed applicable standards. Construction and demolition contractors and other equipment operators would comply with the San Francisco Noise Ordinance and Trust-enforced noise standards to minimize noise disturbance. Existing and proposed noise-sensitive uses, such as the lodge and theatre, might experience increased noise because of increased traffic within the Presidio. Traffic noise reduction measures and noise monitoring would be enforced to reduce any impact. None of the alternatives would cause a noticeable change (greater than 3 dBA) when compared to the traffic noise that would occur under the PTMP. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

HISTORIC RESOURCES

The Main Post includes buildings, landscapes, objects, and archaeological sites that represent every epoch of development from the entire long period of significance of the Presidio (1776 through 1945), with additional National Register-eligible resources dating from the Cold War era. Although notable changes were made after 1945, the resources comprising the Main Post retained enough historic integrity to be listed as contributing components to the National Historic Landmark District (NHLD) when the landmark form was updated in 1993.

Alternative 2 would include demolition of historic and non-historic resources, including demolition brought about by the separate Doyle Drive replacement project. Alternative 2 proposes the demolition or relocation (not included in other compliance efforts) of three contributing resources (Buildings 46, 40, and 41). Removal of two World War II-era barracks (Buildings 40 and 41) for the commemoration of El Presidio is proposed under Alternative 2, as under Alternative 3. Under Alternatives 2 and 3, the demolition of the two World War II-era "temporary" type barracks (Buildings 40 and 41) would adversely affect the NHLD.

Relocation of the barracks to another site in the Main Post or elsewhere in the Presidio would adversely affect the buildings but not the NHLD since the overall inventory of "temporary"-type buildings in the Presidio would be unchanged.

Alternative 2 assumes 146,500 square feet of new construction, including the Presidio Theatre addition, the Presidio Chapel addition, the connector for the archaeology lab and curation facilities, and a new Presidio Lodge. New construction would adversely affect Building 46 (a 50-square-foot shed that would be removed to create a secure entrance for the archeology lab and curation facilities), but would not adversely affect other individual historic resources, or the NHLD. Removing non-historic Building 34 and replacing it with 70,000 square feet of compatibly-designed new lodge space under Alternative 2 would have a lesser impact than Alternative 1. Construction of new additions to the Presidio Chapel and Presidio Theatre under Alternatives 1 and 2 would be the same. Impacts associated with new construction under Alternative 3 (i.e., the History Center) would be greater than under Alternatives 1 and 2 as it would involve demolition of a contributing resource (the tennis court) and incompatible siting (in relation to Building 100). Project parameters, design guidelines, and additional consultation would keep the impact of new construction at the Main Post at a less-than-significant level. The impact of traffic, parking, and circulation features under Alternative 2 would also result in the same impact on historic resources as under Alternatives 1 and 3.

ARCHAEOLOGY

The Main Post contains approximately a dozen archaeological sites or features that contribute to the National Historic Landmark District. Projects and programs undertaken to research and better understand these sites and features can inform long-term management and enhance the visitors' experiences. At the same time, construction projects undertaken in the district have the potential to impact archaeological sites or features, depending on the locations specified and the parameters of design.

The archaeology of the Main Post would benefit under Alternatives 1, 2, and 3, all of which provide for an Archaeology Center with a state-of-the-art lab and curation facilities, as well as for landscape treatments that allow visitors to better understand the Spanish Colonial roots and Mexican heritage of San Francisco.

Differences among the alternatives include the levels of traffic and parking on the El Presidio site and the ultimate treatment of Buildings 40 and 41, two World War II "temporary" barracks that were built on top of the original *plaza de armas* of El Presidio. Alternative 1 would maintain existing traffic patterns, parking, and buildings. Alternative 2 would intermittently detour traffic to facilitate programming, permanently reduce the amount parking, and remove or relocate the "temporary" barracks. Alternative 3 would eliminate through traffic, remove all parking from the site, and remove or relocate the "temporary" barracks to create a pedestrian area in the *plaza de armas*.

The removal or relocation of Buildings 40 and 41 in Alternatives 2 and 3 would enhance the character of the open space in the *plaza de armas*, but this action would be undertaken at the expense of the two World War II buildings that also contribute to the NHLD. In short, the alternatives would make enhancement of El Presidio – a unique resource in California and the western United States – a priority, at the expense of a

resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

New construction under Alternatives 1, 2, and 3 would result in impacts to several NHLD-contributing archaeological features at three locations: the Graham Street corridor, the site south of the Main Parade, and the bluff edge. Alternative 1 would provide for 50,000 square feet of new construction along Graham Street, affecting Spanish-colonial and Civil War-era archaeological features. Alternative 2 would provide for 70,000 square feet of new construction also along Graham Street, but a portion of this square footage would replace the existing Building 34, and therefore the area of impact would be smaller. Furthermore, the new construction would be sited farther north, which would avoid the impacts on El Presidio that would be likely under Alternative 1. New construction for underground parking at the bluff edge in Alternative 2 would also affect NHLD-contributing archaeological resources. Alternative 3 provides for new construction at the site south of the Main Parade, which would have the potential to affect portions of NHLD-contributing archaeological resources.

VISUAL RESOURCES

The Main Post is visually diverse, with a wide variety of architectural styles and building types from every era of its history. The Main Post also offers commanding views across the district and beyond to the bay. In addition, the steeply sloping southern hillsides known as Infantry Terrace provide a dramatic backdrop to the district and striking contrasts to the formal parade grounds. Under Alternatives 1, 2, and 3, existing major view corridors afforded from the Main Parade and El Presidio would be maintained and protected. Rehabilitation of the historic buildings would enhance the visual resources on the Main Post. New construction would be limited, but where allowed, it would be compatible with the visual setting. Under Alternatives 1 and 2, new construction between Graham and Anza streets would reestablish the visual separation that historically existed between the Main Parade and the Old Parade. However, the size of the office building proposed in Alternative 1 would eliminate some internal east-west views. The lodge proposed in Alternative 2 would have less of an impact on east-west views than Alternative 1 but would still block some views. The addition to the Presidio Theatre included in Alternatives 1 and 2 would block views from Moraga Avenue to the bay. This would be a localized impact; the addition would not block any of the key views toward the bay from the Main Parade or from the Officers' Club, which are considered more important. The proposed History Center at the site at the head of the Main Parade in Alternative 3 would partially block some views south toward Infantry Terrace houses. It would also block views from the Officers' Club toward the Montgomery Street Barracks and would block some localized east-west views. Furthermore, its height would be substantially taller than existing Buildings 93 and 97, thereby altering the character of the visual setting.

VISITATION

Alternative 1 would provide a variety of public programs and interpretive and educational opportunities at the Main Post, including a Heritage Center in Building 2. The Main Parade would also create a new focus for visitor activities. Alternative 2 would provide a greater number and variety of facilities for the visiting public than Alternative 1, including an expanded Heritage Center in a portion of Building 50, lodging in a new

building along Graham Street and in Pershing Hall (Building 42), and a more open site at El Presidio. Alternative 3 would provide fewer facilities for the visiting public than Alternatives 1 and 2, with the History Center at the site south of the Main Parade serving as the key visitor facility. The alternatives would be expected to attract between 1.11 million (Alternative 4) and 1.68 million (Alternative 2) visitors annually to the Main Post. Facilities and services would be designed to accommodate these visitation levels on most days. Peak visitor use would occur primarily on summer weekend days and holidays. Implementation of the mitigation measures would ensure that unacceptable impacts on adjacent land uses or on visitor use would not occur. These measures include limitations on visitor opportunities, prohibitions on visitor uses, management controls, conditions for special events, and monitoring of visitor levels to minimize use conflicts.

RECREATION

Alternatives 2 and 3 would convert or remove the Presidio Bowling Center to accommodate new public uses. The Bowling Center could be relocated elsewhere in the Presidio subject to a Request for Proposals and the execution of a lease agreement, as well as any additional site-specific environmental review. Should the Bowling Center not be replaced, its removal would have an adverse impact on current users.

Alternative 3 would also remove the adjacent tennis court. The tennis court could also be relocated to another site within the Presidio as funding permits and subject to site-specific environmental review. Should the tennis court not be replaced, its removal would have an adverse impact on current users.

In accordance with the Trust's vision to maintain or slightly increase the current number of playing fields, Alternative 2 would include an athletic field south of Moraga Avenue. Sufficient parking would be provided to support the use.

WATER RESOURCES

Proposed buildings and parking lots under Alternative 2 would decrease the amount of impervious surface on the Main Post by approximately 187,000 square feet, resulting in a decrease in stormwater runoff compared to Alternative 1. However, the resulting changes to hydrology, groundwater, and wetlands would not be appreciable. The existing trunk systems serving the district have sufficient capacity to accommodate the expected flows. Necessary upgrades to the smaller local systems would be installed to correct identified deficiencies and to facilitate connection to new development. Short-term construction activities, such as excavation, grading, and stockpiling of soil, could temporarily degrade the quality of surface water. Construction site operators of the larger-scaled projects would be required to prepare Stormwater Pollution Prevention Plans (SWPPPs) that would provide for temporary measures to control sediment and other pollutants during construction. Project proponents of building and site projects such as parking lots would be required to develop and implement Stormwater Control Plans that include post-construction Best Management Practices (BMPs) appropriate for development sites to minimize site imperviousness, control pollutant sources, and incorporate treatment and flow-control facilities that retain, detain, or treat runoff and protect water quality.

According to geotechnical investigations done near proposed construction sites south of the Main Parade and along Graham Street, the

groundwater table is expected to be 50 feet below ground surface (bgs). The investigations also encountered perched groundwater at 19 to 25.5 feet bgs south of the Main Parade. Below-grade improvements at the sites under any of the alternatives are not expected to extend to the groundwater table. Improvements at the two sites would affect the perched water table. These impacts would be localized, however, as the perched groundwater would migrate around the below-grade structure.

An active dewatering system consisting of a series of wells would be necessary during excavation at both sites. Any subsurface water encountered during construction would be discharged into the sewer system. A permanent active dewatering system would not be required.

CUMULATIVE IMPACTS

The effects of various past, present, and reasonably foreseeable actions would have a cumulative relationship to the effects of development within the Main Post district under all alternatives. Overall, the incremental impacts associated with any of the alternatives are not expected to be significant, and resources of concern would not be degraded, with the exception of impacts on historic resources and archaeological resources. In several instances, the incremental contribution of the alternatives to the cumulative effect on the Main Post and Presidio would be neutral or beneficial.

By accommodating a variety of land uses, removing pavement, and demolishing buildings at the Main Post, the cumulative actions would result in substantially more open space of higher quality than exists today, with only a slight increase in the overall building square footage. Overall, cumulative actions would expand open space by approximately 20 acres to 48 acres, an approximately 70-percent increase over existing conditions. Removing parking from the Main Parade and relocating it to the perimeter of the Main Post, redesigning and partial tunneling of the Doyle Drive corridor (Doyle Drive), and removing underground pipes and lined channels along the creek system (Tennessee Hollow and the Quartermaster Reach) would provide a more park-like setting, enhance the historic setting, and create more outdoor recreational space. Building space at the Main Post due to the cumulative actions would increase by approximately 6 percent to a maximum of 1.215 million square feet under Alternative 1 (14,000 square feet more than under Alternative 2). However, none of the new buildings would conflict with adjacent building or land uses or compromise the nature and character of the Main Post, the surrounding neighborhoods, or the Presidio at large.

As a result of the increase in the amount of building space, the Main Post would comprise a large portion of the vehicle trips generated by Area B of the Presidio. These trips, along with projected growth in traffic volumes in the area, would affect the operation of some local intersections. Mitigation measures adopted as part of the final PTMP EIS and measures adopted as part of the final SEIS would improve intersection operations to acceptable levels under cumulative conditions. The Trust would not install traffic lights in the Main Post, however.

Parking improvements would include expansions to existing lots, improvements to the efficiency of layouts in existing lots, and some new parking lots. Existing street parking would be preserved, and new street parking would be added. After the decentralized lots and added street parking are complete, approximately 1,817 to 1,910 of the current 2,200 parking spaces would remain in the Main Post (excluding Infantry Terrace). Should total parking demand at the Main Post exceed supply,

the Trust would continue to implement components of its existing transportation demand management (TDM) program within the district and throughout the Presidio or adopt more aggressive strategies, such as requiring tenant participation in more TDM program elements, increasing parking fees, and providing more frequent and/or extensive shuttle service to reduce automobile usage and associated parking demand by all tenants, occupants, and visitors.

Alternative 2 would contribute to the overall level of change in the historic resources within the Presidio since the writing of the 1993 NHL update, inclusive of projects planned within the foreseeable future. The rehabilitation of Crissy Field (completed in 2001) removed 32 historic buildings to restore missing historic and natural features and to introduce parking for recreational activities. The construction of the Letterman Digital Arts Center (completed in 2005) replaced non-historic buildings and a large parking lot with compatibly designed new buildings and landscape. The replacement of Doyle Drive (which began construction in 2009) will replace the historic elevated roadway with a new parkway, remove historic buildings and streets, and alter the appearance of the existing bluff to accommodate the parkway. Alternative 2 would contribute to this cumulative impact by removing or relocating three historic resources, rehabilitating the remaining un-rehabilitated buildings, and adding new elements that would change the appearance of the Main Post.

New construction, building demolition, infrastructure upgrades, creek restoration, environmental remediation, and roadway reconstruction associated with foreseeable cumulative actions, including those at the Main Post, could adversely affect archaeological sites that contribute to the NHLD. At the Main Post, these include contributing archaeological features of the NHLD dating from the Civil War era to the turn of the 20th century. The cumulative actions could also adversely affect unknown sites that may be identified through future research or an unanticipated discovery. Stipulations contained in the programmatic agreement documents developed through the Section 106 NHPA process for the actions would help avoid, minimize, or mitigate potential adverse effects.

The potential loss of the Presidio Bowling Center and three tennis courts in the Presidio, including the tennis court adjacent to the Bowling Center (under Alternative 3) and two removed for development of the Letterman Digital Arts Center within the Letterman district, would decrease active recreational space at the Presidio for bowlers and tennis players. Activities occurring in the city, specifically, the potential short-term unavailability and long-term reduction of public tennis courts in Golden Gate Park, would incrementally contribute to the cumulative adverse impact on existing tennis facilities and programs in the general area that includes the Presidio.

Issues to be Resolved

The following decisions that are beyond the scope of the final SEIS must still be made.

SELECTION OF ALTERNATIVE FOR IMPLEMENTATION

The mitigated preferred alternative (Alternative 2) is the Trust's identified alternative for fulfilling the purpose and need, taking into consideration the Trust's statutory mission and responsibilities, as well as comments received on the draft SEIS and supplement. Identification of

the mitigated preferred alternative does not indicate a final decision or commitment to approve or execute proposals described in the alternative. The alternative that is ultimately selected for implementation may combine various elements of the alternatives, or may fall within the range they represent. Until the NEPA process is completed, no final approvals may be granted and no development agreement or lease may be signed for any of the proposals under review in the final SEIS.

CHOICE OF MITIGATION MEASURES

The final SEIS discusses the full spectrum of appropriate mitigation measures for each environmental impact, including measures outside the jurisdiction of the Trust. The Record of Decision (ROD) will identify which mitigation measures will be adopted as a condition of the Trust's approval of the selected alternative. The ROD will also include a monitoring and enforcement program for each mitigation measure that has been made a condition of project approval. The Trust's Compliance Manager will be responsible for monitoring compliance with the monitoring and enforcement program.

TREATMENT OF HISTORIC PROPERTIES

The Trust initiated National Historic Preservation Act (NHPA) compliance at the beginning of the draft SEIS process (November 2007) and engaged in consultation under Section 106 of the NHPA with the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, the National Park Service, and 17 other consulting parties. The Section 106 consultation stipulates measures to resolve the effects on resources that can be known in advance of proposed work, including project parameters and avoidance measures. Archaeological treatment plan(s) and processes for design review will outline the steps that will be taken to address effects that cannot be fully identified before work begins (i.e., effects on undiscovered archaeological resources). The ROD will conclude the NEPA process and also fully account for the provisions of the Programmatic Agreement for the Main Post Update that resulted from the NHPA Section 106 process (Appendix B).

REVIEW AND INPUT ON DESIGN OF PROJECTS

During scoping for and review of the draft SEIS, the public expressed great interest in the design of any new construction in the Main Post. The Trust will continue to engage the public on this issue. Refinements to preliminary design concepts for proposals during the review process, and as a result of final design development, are expected. The Trust will provide opportunities beyond the NEPA process for public input on the design of all freestanding buildings and major additions to historic buildings, including landscape plans, during one or more public workshops, meetings, or other public forums. The Trust Board of Directors will review and consider all information received before issuing final approval. Any notable modifications to the projects' designs will be analyzed to determine whether it would affect information and analysis contained in the final SEIS.

Next Steps

The Trust will circulate the final SEIS for at least 30 days after filing the final SEIS with the United States Environmental Protection Agency. Although there is no requirement for the Trust to respond to comments

received on the final SEIS, the Trust will consider all comments received as part of its decision-making process. The Trust will determine whether the final SEIS meets the standards for EIS adequacy under the NEPA, the Council on Environmental Quality (CEQ) NEPA Regulations, and its own NEPA regulations (36 CFR 1010), and will make its final decision on the selected alternative in a ROD. The ROD will be a written public record explaining why the Trust has taken a particular course of action. It will allow the Trust to implement the decision, including granting approvals, signing development agreements and leases, and applying adopted mitigation measures.

Purpose and Need

This section briefly describes the underlying purpose and need to which the Trust is responding in proposing changes at the Main Post, and the objectives the Trust intends to achieve. The updated planning concept for the Main Post is described in the Main Post Update (Trust 2010a), the planning document accompanying the final SEIS, and is the mitigated preferred alternative[3] evaluated in the final SEIS. The Main Post Update, if adopted by the Presidio Trust Board of Directors, will amend the provisions for the Main Post district in the PTMP.

1.1 Statement of Purpose and Need

The purpose of the Main Post Update is to implement the Trust's vision for the Main Post as the "heart of the Presidio," to update the planning concept for the Main Post district as described in the PTMP, and to add greater detail to the planning for the Main Post than was possible in 2002 when the PTMP was completed.[4] The Main Post Update is needed because, while a community is growing in the Main Post and visitation has increased, the Main Post has not yet become the "focal point for visitor orientation" and "lively pedestrian district"[5] contemplated in the PTMP. In order to realize the vision of the Main Post described in PTMP, the Main Post Update builds on progress to date, responds to new opportunities, and proposes a number of actions that the Trust intends to pursue. These actions[6], as they relate to the project's purpose, include:

[3] *The mitigated preferred alternative differs from the preferred alternative analyzed in the supplement to the draft SEIS for the Main Post Update (Trust 2009a) in that it avoids, minimizes, or mitigates potential adverse affects on the National Historic Landmark District and responds to most of the concerns raised by members of the public during review of the supplement.*

[4] *The PTMP (Presidio Trust 2002a), adopted in August 2002, is the Trust's comprehensive land use plan, policy framework, and established management direction for Area B of the Presidio.*

[5] *The PTMP, pages 62-63.*

[6] *Certain actions are proceeding outside the PTMP Main Post Update SEIS process. These proposals include the International Center to End Violence (Building 100), upper Tennessee Hollow revitalization, and the Main Parade rehabilitation. In each case, an environmental assessment (EA) was prepared, followed by a finding of no significant impact (FONSI). NHPA compliance was also completed in parallel with the NEPA processes, with findings of no adverse effect for each project. In each case, the Trust also found that those actions were consistent with the PTMP, were independently justified, did not have significant environmental impacts, and would not prejudice other decisions on the Main Post. Nonetheless, the cumulative impacts of these and other reasonably foreseeable actions at or near the Main Post (such as reconstruction of Doyle Drive) are being assessed in the final SEIS as cumulative actions.*

- Maintain the Main Post as the heart of the Presidio through rehabilitation, reuse, and interpretation of the remaining historic buildings, formal historic landscapes, and natural and archaeological resources.
- Preserve and refine open spaces by "greening" the Main Parade, commemorating and interpreting the original El Presidio, and enhancing physical and visual connections to Crissy Field.
- Retain the transit hub at the north end of the Main Post to provide safe and convenient access to transit.
- Retain the Officers' Club as a venue for meetings, cultural events, and community activities, and establish a Heritage Center in a portion of the building.
- Establish an Archaeology Center with a lab and curation facilities in Buildings 44, 47, 48, and 49.
- Continue existing Presidio administrative functions.
- Collaborate with the National Park Service to develop a Visitor Center and support interpretive functions.
- Use the Anza Esplanade as an opportunity to interpret Presidio history.
- Ensure that new construction for the Presidio Lodge, the Presidio Theatre addition, and the addition to the Presidio Chapel is sited to be compatible with the historic district.
- Bring visitor amenities such as lodging and restaurants to make the Main Post the heart of the park.
- Use lighting, signage, and site furnishings to make visitors feel welcome, safe, and comfortable.
- Improve pedestrian access and close portions of Arguello Boulevard and Sheridan Avenue.
- Locate parking on Taylor Street and on Moraga Avenue on the site of Building 385.

1.2 Objectives of Main Post Update

The Main Post Update seeks to achieve the following objectives (expressed as implementation strategies in the Main Post Update) in establishing the Main Post as the heart of the park:

1. Reveal the Presidio's history
2. Welcome the public
3. Employ 21st century green practices

REVEAL THE PRESIDIO'S HISTORY

The Presidio's history is central to the visitor experience at the Main Post. Many of the features that once made the Main Post and its open spaces compelling, however, have been obscured by later additions as well as by building demolition. The site's organization and layers of history are therefore difficult to discern. The historic themes reflected in the district's buildings, landscapes, and archaeology should be revealed and made more understandable to visitors. The Trust expects to accomplish this by rehabilitating the Main Post's historic resources and

by providing innovative programming to introduce the public to the Presidio's heritage.

Context

The Presidio has played an important role in the development of the American West. Founded in 1776, it was the northernmost garrison in Spanish California and effectively the birthplace of San Francisco. It guarded the city's bay through two centuries of growth and after World War I was the U.S. Army's seat of command for the western states. The Presidio's period of historic significance is not limited to one period, but embraces two centuries of change: from 1776 to 1945.

The Main Post is the Presidio's most historic district. Every period of the Presidio's history is reflected in the buildings, landscapes, and archaeological resources that make the Main Post such a rich and important historical site. Successive generations added their mark to the Main Post, leaving layer after layer of architectural and archaeological history, providing a record of what was important at a given time but often obscuring earlier periods.

The PTMP cautioned that the future of the Presidio must respect the material evidence of the past. It also proposed preserving and rehabilitating the landscapes and buildings that define the park's character, and making accessible the stories inherent in archaeological remains that mostly lie beneath the ground.[7]

[7] *The PTMP, page 3.*

Strategies

Because many of the Main Post's most compelling features, specifically its open spaces, have become indistinct, the Trust intends to "roll back" some of the late 20th-century additions to the Main Post in order to restore the site's historic organization and to make the many layers of history more visible. The Trust also seeks to establish the Main Post as the heart of the park by making it more welcoming to the public (see below). An understanding of the history and development of the Main Post provides an important context for understanding how the projects and improvements planned for the Main Post can achieve these dual objectives.

WELCOME THE PUBLIC

The Presidio's history at the Main Post is best preserved through reuse of its buildings and landscapes; its historic character is best preserved by bringing people to the Main Post. Visitor amenities and programs should welcome a broad public while ensuring that the Presidio's historic significance is not obscured. The Trust seeks to bring the Trust's vision for the Main Post fully to life by:

- rehabilitating, reusing, and interpreting the Main Post's historic buildings, formal historic landscapes, and archaeological resources
- providing restaurants, lodging, and other visitor-serving uses
- providing innovative heritage programming and site interpretation
- creating a safe, inviting, and comfortable place for the public

Context

The Main Post was once the bustling center of an important military command. In consideration of its historic character, the Trust envisioned the Main Post as a "focal point for visitor orientation" and as a "lively pedestrian district," as well as a "community center where people live, work, and enjoy themselves."[8] Since adopting the PTMP in 2002, the Trust has been implementing this vision for the Main Post. Important historic resources, such as the Civil War-era Funston streetscape, have been rehabilitated. Remediation of a former U.S. Army landfill (Fill Site 6A) allowed for an important first step in restoring the Tennessee Hollow watershed. Nearly three-fourths of the Main Post's historic buildings have been rehabilitated. Ongoing archaeological investigations of El Presidio have enriched the understanding of life at the Presidio during the 18th- and early 19th-centuries. Educational experiences for children are being developed at the Presidio Archaeology Lab and as part of special cultural exhibits at the Officers' Club. The transit center at the Main Post's north end, which also provides visitor orientation, restrooms, and a restaurant, serves as a hub to the Trust's comprehensive transportation program. The Trust's PresidiGo shuttle bus service, which carries 1,800 passengers daily and connects residents, tenants, and the public to sites throughout the park and to the regional transit system, is a vital component of this program.

Although a community is growing in the Main Post and visitation has increased, the Main Post is not yet the visitor destination foreseen by the Trust in the PTMP. Visitor services and activities for the public are insufficient to draw people to the Main Post and make them feel welcomed. The number of people who live and work in the Main Post has not reached the level that the district experienced when it was the center of a military post; on most days, the Main Post feels empty. The park has no lodging, a traditional way that national parks have welcomed people, both those who visit for a day and those who want the experience of an overnight stay in the park. Key historic buildings, such as the Presidio Theatre, remain un-rehabilitated and vacant. It is also hard to discern the many layers of the Main Post's history and see why the Presidio is so important. A visitor to the Main Post would have difficulty understanding why the Presidio is a National Historic Landmark District (NHLD).

[8] *PTMP, pages 62-63.*

Strategies

The Trust intends to build on all the work that has already been accomplished to make the Main Post more inviting to the public. A Heritage Center would provide visitors with information about the park's history and natural resources, encouraging them to explore the Main Post and the Presidio as a whole as a "museum without walls." An Archaeology Center would be relocated to a prominent place in the Main Post adjacent to a more apparent and recognizable El Presidio. The Presidio Theatre and Presidio Chapel would be rehabilitated and reused for their original purposes, and expansions would allow for enhanced programming. Public-serving uses would occupy the ground floors of the Montgomery Street Barracks buildings. Construction of the Presidio Lodge would welcome visitors and animate a transformed Main Parade and new pedestrian walkway, the Anza Esplanade. Parking would be relocated from the Main Parade to the perimeter of the Main Post to

better serve access points and the post's buildings. The Trust is proposing these and other changes in the Main Post Update to advance its vision of making the Main Post a visitor destination befitting a premier national park site.

EMPLOY 21ST CENTURY GREEN PRACTICES

Rehabilitation of buildings, operation of utilities, and daily maintenance of structures and grounds keep the park functioning smoothly. Many of the Presidio's infrastructure systems need significant upgrading or replacement, thus providing an opportunity to employ 21st century "green" practices. During planning, design, and management of the district, up-to-date, environmentally favorable practices should be used to rehabilitate the NHLD and make the historic Main Post a "greener" place. The Trust proposes to accomplish this by integrating such practices into all relevant Main Post actions.

Context

The Trust has a capital investment program designed to bring the Presidio infrastructure up to current standards so that it may serve new land and building uses. The PTMP identifies safety, efficiency, and long-term sustainability as primary objectives for park operations and infrastructure.[9] Since 2002, the Trust has broadened the concept of sustainability to include both historic preservation and park operations, not just building materials or maintenance of facilities. Sustainable design criteria are being applied to new construction as well as to historic facilities, integrating sustainable materials and systems to the extent feasible.

Strategies

At the Main Post, new construction and building rehabilitation would be designed to achieve a Leadership in Energy and Environmental Design (LEED) Silver rating or better. Sustainable design features such as green roofs and photovoltaic panels would be carefully located to avoid detracting from the historic character of the Main Post. The lawn of the Main Parade and other landscapes would be plumbed for irrigation with reclaimed water. Stormwater runoff would be reduced and cleaned with features such as bio-swales and permeable pavement. Integrated pest management and green waste composting would reduce the environmental impacts of park maintenance. The Main Post's transportation network would support pedestrians and cyclists, and provide alternatives to automobiles. The PresidiGo shuttle system would be expanded to serve more Main Post employees and visitors. Transportation demand management and parking management programs would encourage the use of alternative transportation and reduce the number of single-occupancy vehicle trips. Electric vehicle (EV) and plug-in hybrid electric vehicle (PHEV) charging infrastructure would be available at major parking lots to encourage the use of low- and no-emission vehicles. The Trust intends to pursue this wide array of Main Post projects and initiatives to prevent pollution, reduce waste, and promote alternative modes of transportation and fuel.

[9] *PTMP, page 54.*

1.3 Purpose and Contents of Supplemental Environmental Impact Statement

The Trust has determined that new information pertinent to the Main Post may have a bearing on the planning concept or its impacts as identified in the PTMP and final PTMP EIS (Trust 2002b), thereby warranting supplementation consistent with the NEPA.[10] The Trust has prepared the final SEIS to disclose:

- Alternatives to the planning concept analyzed in the final PTMP EIS
- The environmental impact of the alternatives, including the mitigated preferred alternative
- Any adverse environmental impacts that will be unavoidable
- Appropriate mitigation measures not already included in the final PTMP EIS that could alleviate the potential environmental effects of the alternatives
- The relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity
- Any irreversible and irretrievable commitments of resources resulting from implementation of the alternatives

This document, together with the accompanying Response to Comments, will be filed as the final SEIS. The final SEIS has been developed to be accessible to the general public, with the goal of "good analysis and clear presentation of the alternatives including the proposed action."[11] It has been formatted in accordance with the CEQ's NEPA Regulations[12] and the Trust's policies and procedures on environmental quality and control.[13] The document provides new analysis, information, and changes made in response to public comments on the PTMP Main Post Update Draft SEIS (Trust 2008b), which was circulated for public review and filed in June 2008. The final SEIS incorporates the entire draft SEIS, as well as the entire PTMP Main Post Update Supplement to the Draft SEIS (Trust 2009a), which was circulated and filed in March 2009. The final SEIS also incorporates by reference the Main Post Update, which is analyzed as the mitigated preferred alternative in the final SEIS.

The final SEIS tiers[14] from the final PTMP EIS and analyzes several actions involving new freestanding buildings or building additions that required "more specific planning" [15] and environmental review as foreseen in the PTMP. In tiering from the final PTMP EIS, the final SEIS summarizes and incorporates by reference the information and

[10] *See 40 CFR 1502.9 (supplementation).*

[11] *See 36 CFR 1502.10.*

[12] *See 40 CFR 1502.10 (recommended format).*

[13] *See 36 CFR 1010.9 (preparation of an EIS).*

[14] *See 40 CFR 1502.20 and 40 CFR 1508.28 (tiering). The final PTMP EIS can be viewed at the Presidio Trust Library or on the Trust's website at* http://www.presidio.gov/Trust/Documents/EnvironmentalPlans/.

[15] *The PTMP states that actions involving new construction "whose potential effects are either uncertain or potentially significant will be subject to public notice, outreach and consultation, public 'scoping', and public review of specific design guidelines and/or schematic design, and environmental documents prior to any decision about whether to implement the project" (page 131).*

analysis presented in the final PTMP EIS and provides site-specific analysis for the following actions:

- The free-standing Presidio Lodge on the site of the Presidio Trust Headquarters (Building 34) and the area south of Building 34
- An addition to the Presidio Theatre (Building 99)
- An addition to the Presidio Chapel (Building 130)
- An addition to link Buildings 47 and 48 and provide a public entrance to the archaeology lab and curation facilities

Concurrently with the SEIS analysis, the Trust also provided for the review of the proposals under the consultation process required by Section 106 of the NHPA.[16] This process identifies the historic resources that may be affected by an undertaking, assesses the effects on historic resources through a Finding of Effect (FOE), and then looks for ways to "avoid, minimize, or mitigate" the effects identified in the FOE. The final FOE was circulated on July 1, 2009 (Presidio Trust 2009b). The Section 106 consultation has included the National Park Service, the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other consulting parties. Table 2 shows the process for coordinating the NEPA and NHPA as explained by draft guidance provided by the Council on Environmental Quality (CEQ) (first two columns of table), and documents compliance steps taken by the Trust (third column). The NEPA process will conclude in a record of decision (ROD) that will fully account for the provisions of the Programmatic Agreement for the Main Post Update (PA-MPU) (Presidio Trust 2010b) that concluded the NHPA process. A copy of the PA-MPU is provided in Appendix B.

[16] *Section 106 provides an opportunity for members of the public with a demonstrated interest in the project to participate in the process as consulting parties. Many community members participated in the consultation process. A list of the consulting parties to the process is provided in the final FOE and the PA-MPU.*

REFERENCES

Advisory Council on Historic Preservation (ACHP). 2002. *ACHP Section 106 Regulations, Section-by-Section Questions and Answers.* Updated April 26. *http://www.achp.gov/106q&a.html.*

Council on Environmental Quality (CEQ). 1981 and 1986. *CEQ 40 Questions—Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations.* 46 FR 18026 (March 23, 1981) as amended by 51 FR 15618 (April 25, 1986).

_____. 2008. *Draft CEQ Handbook on Coordinating the National Environmental Policy Act with Other Federal Environmental Laws.*

Presidio Trust. 2002a. *Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco.* Dated May.

_____. 2002b. *Final Environmental Impact Statement. Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco.* Three Volumes. Dated May.

_____. 2008a. *Draft Finding of Effects.* Presidio Trust Main Post Undertaking, NHPA Consultation Package. Dated May 27.

_____. 2008b. *Presidio Trust Management Plan Main Post Update Draft Supplemental Environmental Impact Statement.* Dated June.

_____. 2009a. *Presidio Trust Management Plan Main Post Update Supplement to the Draft Supplemental Environmental Impact Statement.* Dated February.

_____. 2009b. *Final Finding of Effect.* Dated July.

_____. 2010a. *Final Main Post Update.* Dated November.

_____. 2010b. *Programmatic Agreement Among the Presidio Trust, the Californian State Historic Preservation Officer, the National Park Service, and the Advisory Council on Historic Preservation, for the Main Post Update to the Presidio Trust Management Plan, Presidio of San Francisco National Historic Landmark, San Francisco, CA.*

2 COORDINATING THE NATIONAL ENVIRONMENTAL POLICY ACT WITH THE NATIONAL HISTORIC PRESERVATION ACT FOR THE MAIN POST UPDATE

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
STEPS TAKEN TO DATE			
1	Identify project objectives and scope	Establish "undertaking" • Notify appropriate SHPO • Plan to involve the public • Identify other consulting parties	Notice of Intent sent to consulting parties (ACHP, SHPO, NPS, NTHP, PHA), October 23, 2007 NEPA scoping initiated with Notice of Intent, October 29, 2007
2		Finding • Undertaking is type that might affect historic properties; or • Project is covered by an existing PA	Section 106 consultation package sent to ACHP, SHPO, NPS, NTHP, and PHA, November 11, 2007
3	Identify social, economic, and environmental constraints	Through consultation: • Identify historic properties • Evaluate historic significance • Resolve eligibility disputes	NEPA scoping continues; public meeting November 28, 2007 1st Section 106 consultation meeting, December 11, 2007 Scoping ends December 15, 2007
4		Finding • Historic properties affected Time to resolve disputes/objections early in the process, in consultation with SHPO and other consulting parties	2nd consultation package sent to consulting parties, January 28, 2008 2nd consultation meeting, February 26, 2008
5	Develop preliminary alternatives		Alternatives, including publicly-suggested Alternative 2A, developed
6	Analyze the impacts of the alternatives	Through consultation, assess adverse effects by applying Criteria of Adverse Effect	Draft SEIS prepared Draft FOE prepared

	NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
7		Finding • Adverse effects Time to resolve disputes/objections	3rd consultation package mailed to consulting parties, March 18, 2008
8	Incorporate alternatives analysis in the NEPA document, and circulate document for comment	Through consultation, consider comments and negotiate mitigation measures	Draft SEIS available for comment, June 13, 2008 Public tours, June, July, August 2008 1st Public Trust Board of Directors (Board) meeting, July 14, 2008 Public Transportation Workshop, July 28, 2008 Draft FOE available for comment, August 8, 2008 3rd consultation meeting, September 16, 2008 Alternatives Workshops, September 25, September 28, October 2, 2008 Public meeting on Conforming New Construction, November 19, 2008
9	Incorporate comments into the identification of a preferred alternative	"Avoid, minimize, mitigate" adverse effects through additional consultation and pursue: • MOA • PA • Other program alternative Time to resolve disputes/objections	Identification of Preferred Alternative, December 5, 2008 4th Section 106 consultation meeting, December 5, 2008 2nd Public Board meeting, December 9, 2008 Supplemental draft SEIS and revised draft FOE available for comment, February 2009 5th Section 106 consultation meetings, April 21-22, 2009 Public comment on all draft documents extended through June 1, 2009, 90 days after release of supplemental draft SEIS/revised draft FOE Release of final FOE, July 1, 2009 6th Section 106 consultation meetings, August 18-20, 2009 Release of first draft PA-MPU, November 17, 2009

NEPA Guidance	*NHPA Section 106 Guidance*	*Presidio Trust Compliance Steps*
		7th Section 106 consultation meeting, January 26, 2010 Release of second draft PA-MPU, March 16, 2010 Release of third draft PA-MPU, August 13, 2010 8th Section 106 consultation meeting to review draft PA-MPU, September 14-15, 2010 Release of final, executed PA-MPU, November 2010 Release of final SEIS for public review, November 2010
NEXT STEPS		
10 Issue FONSI/ROD	File final PA with signatory and consulting parties; include copy in FONSI/ROD	Adopt ROD for public review

Sources: CEQ 1981 and 1986, ACHP 2002, CEQ 2008

Notes: ACHP = Advisory Council on Historic Preservation
CEQ = Council on Environmental Quality
EIS = Environmental Impact Statement
FOE = Finding of Effect
FONSI = Finding of No Significant Impact
MOA = Memorandum of Agreement
NEPA = National Environmental Policy Act
NHPA = National Historic Preservation Act
NPS = National Park Service
NTHP = National Trust for Historic Preservation
PA = Programmatic Agreement
PHA = Presidio Historical Association
ROD = Record of Decision
SEIS = Supplemental Environmental Impact Statement
SHPO = State Historic Preservation Officer

See Glossary for proposed action, preferred alternative, and undertaking

The following describes the range of alternatives being evaluated, including the mitigated preferred alternative, and those that have been eliminated from detailed study. A comparison of the alternatives is provided in Table 3.

2.1 Alternative 1: PTMP Visitor and Community Center

This alternative represents the Final Plan Alternative analyzed in the final PTMP EIS and reflects progress made in implementing the PTMP since it was adopted in 2002. The alternative would rehabilitate and reuse buildings within the Main Post consistent with land use assumptions in the final PTMP EIS. Alternative 1 is the required NEPA "no action" alternative[17] that serves as a benchmark for comparison among alternatives and allows the public to understand the extent to which other alternatives are consistent with the adopted management approach and intensity of land use provided for in the PTMP.

CONCEPT

The Main Post would remain the heart of the Presidio; it would be a focal point for visitor orientation and a community center where people live, work, and enjoy themselves (Figure 1). The Main Post's rich collection of historic buildings and landscapes would be the backdrop for visitor programs and a setting for businesses, organizations, and Presidio community services. Significant open spaces would be preserved and restored. Preferred building uses would include mixed uses with a focus on visitor programs (such as the Archaeology Center), community and related activities, and services including a mix of cultural and educational programs, lodging, offices, and other uses.[18] The Presidio Theatre would be reactivated as a venue for film or performing arts. Finally, the Presidio Chapel would be expanded slightly to accommodate accessibility and to support a broader range of programs.

PUBLIC USES

Visitor-serving uses would be accommodated in approximately 41 percent (503,000 square feet) of the building space in the district and would include a variety of cultural and educational uses, small-scale lodging, and other amenities. Cultural and educational facilities and programs would include a Visitor Center in the Officers' Club (Building 50), a Heritage Center (Building 2), an Archaeology Center (Buildings 44, 47, 48, 49, and part of 50), the Presidio Theatre and addition, the Presidio Chapel and addition (Building 130), Herbst International Exhibition Hall (Building 385), the Walt Disney Family Museum (Buildings 104, 108, and 122), the Bay School of San Francisco (Building 35), and the Presidio Child

[17] *See CEQ's Forty Questions No. 3.*

[18] *See pages 62-69 of the PTMP for a complete description of the PTMP Visitor and Community Center.*

3 COMPARISON OF ALTERNATIVES

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
EXISTING TOTAL BUILDING AREA (sf)	1,148,000	1,148,000	1,148,000	1,148,000
MAXIMUM BUILDING AREA (sf)	1,214,500	1,201,000	1,161,000	1,140,000
PROPOSED BUILDING USES (sf)				
Industrial/Warehouse/ Infrastructure	42,000	67,000	42,000	42,000
Office	436,000	391,000	488,000	510,000
Retail	77,000	59,000	42,000	42,000
Lodging[1]	43,000	110,000	49,000	16,000
Conference	25,000	25,000	25,000	25,000
Recreational	34,000	21,000	21,000	34,000
Cultural/Educational	324,000	361,000	327,000	276,000
Residential	234,000	167,000	167,000	195,000
MAXIMUM DEMOLITION (sf)	44,000	94,000	64,000	34,000
MAXIMUM NEW CONSTRUCTION (sf)	110,000	146,500	77,000	26,000
PROPOSED PUBLIC USES	Visitor Center in Building 50 and Heritage Center in Building 2	Heritage Center in Building 50	Visitor Center in Building 50	Visitor Center in Building 50
	Bowling Center in Building 93	Public uses in Building 93 at site south of the Main Parade	History Center at site south of the Main Parade	Bowling Center in Building 93
	Presidio Theatre and addition (Building 99)	Presidio Theatre and addition	Presidio Theatre with no addition	Presidio Theatre leased out for the highest and best use or mothballed

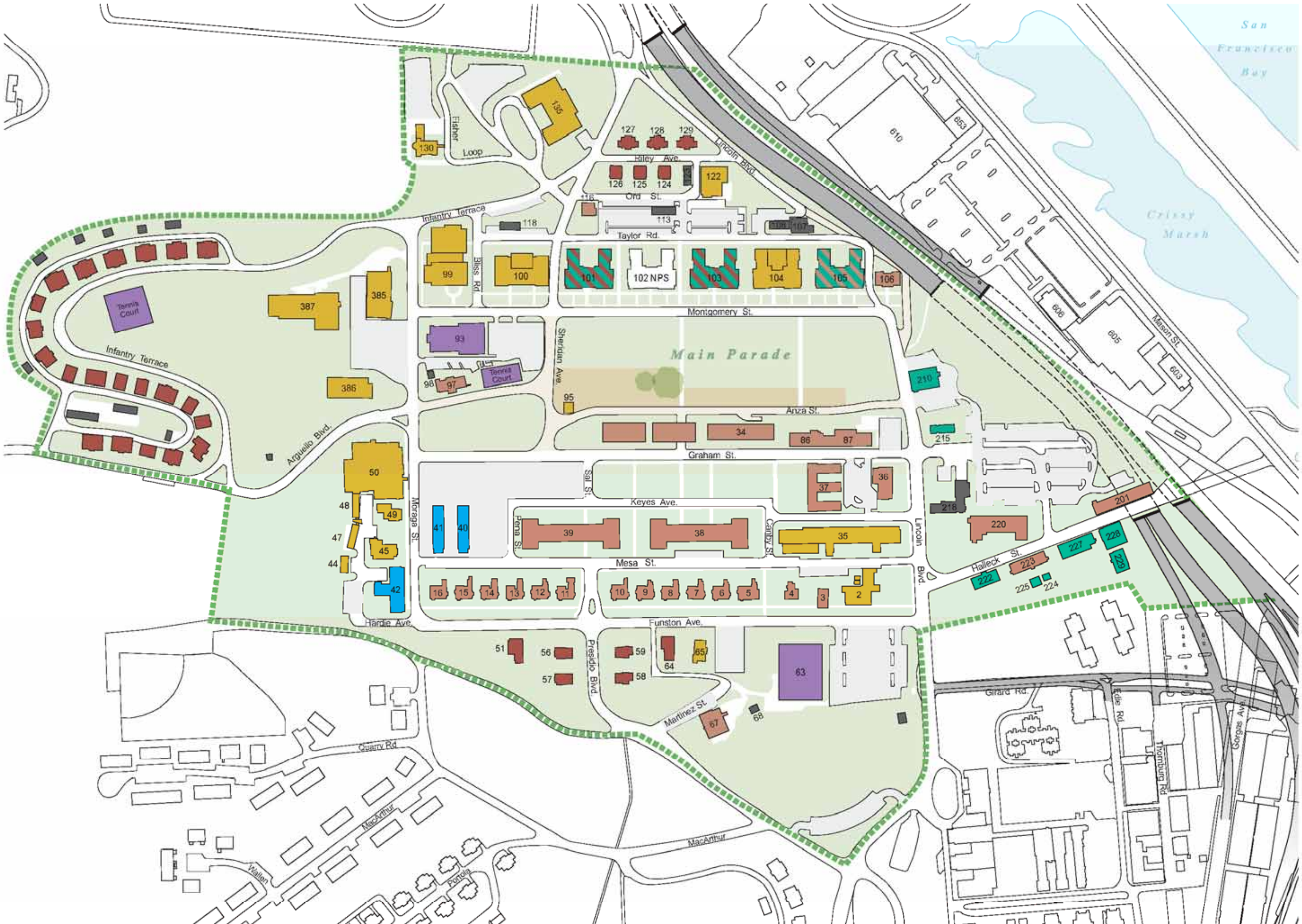
	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update*	*Alternative 3: History Center*	*Alternative 4: Status Quo*
	Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Archaeology Center at Buildings 44, 47, 48 (with addition), and 49	Archaeology Center at Buildings 44, 47, 48, and 49 without addition	Archaeology Center buildings leased out for the highest and best use or mothballed
	Excavation and commemoration of El Presidio with Buildings 40 and 41 and parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and limited parking	Excavation and commemoration of El Presidio without Buildings 40 and 41 and no parking	Limited excavation and commemoration of El Presidio and parking
	Lodging in Pershing Hall (Building 42) and dormitory rooms for visitors in Buildings 40 and 41	Lodging in Pershing Hall and at Building 34 site	Lodging in Pershing Hall and B&Bs in upper Funston Avenue Officers' Quarters (Buildings 11-16)	Residences in Pershing Hall and dormitory rooms for visitors in Buildings 40 and 41
	Presidio Chapel and addition	Presidio Chapel and addition	Presidio Chapel with no addition	Presidio Chapel with no addition
PARKING SPACES[2]	1,817	1,910	1,892	1,852
GUEST ROOMS	22	130	58	None
RECREATIONAL FACILITIES	Infantry Terrace tennis courts	Infantry Terrace tennis courts	Infantry Terrace tennis courts	Infantry Terrace tennis courts
	Main Post tennis court	Main Post tennis court	YMCA Fitness Center	Main Post tennis court
	Bowling Center	YMCA Fitness Center		Bowling Center
	YMCA Fitness Center	Athletic field		YMCA Fitness Center

[1] *Square footage calculations for lodging and conference were previously combined into one category. They have been broken up into two categories here to provide additional specificity.*

[2] *Excluding Infantry Terrace residential neighborhood.*

sf = square feet

TBD = to be determined


San Francisco Bay
Crissy Marsh
Main Parade
Infantry Terrace
Fisher Loop
Riley Ave.
Ord St.
Taylor Rd.
Lincoln Blvd.
Bliss Rd.
Montgomery St.
Sheridan Ave.
Anza St.
Graham St.
Keyes Ave.
Sal St.
Pena St.
Canby St.
Moraga St.
Mesa St.
Halleck St.
Arguello Blvd.
Hardie Ave.
Funston Ave.
Presidio Blvd.
Martinez St.
Quarry Rd.
MacArthur
Wallen
Portola
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Mason St.
Tennis Court
102 NPS

0 400 FT

Source: Presidio Trust 2010

Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking

Development Center (Building 387). Existing meeting facilities in the Golden Gate Club (Building 135) would be retained. To support the Presidio's visitors and its tenant community, approximately 77,000 square feet of food and retail services would be provided, including a bank, post office, cafes, transit center, and restrooms. Additional community services would be located primarily along Halleck Street. More information on proposed public uses of note is provided below.

Visitor Center (Building 50)

A Visitor Center would provide information on Presidio history and points of interest in the park. In addition to rotating exhibits, the Visitor Center would house a bookstore.

Heritage Center (Building 2)

While not specifically identified in the PTMP, a small (approximately 13,500-square-foot) Heritage Center at the former Presidio Army Museum (Building 2) would provide visitors to the Presidio with orientation services, including opportunities to view exhibits, films, audiovisuals, and other media that describe the Presidio's resources and available activities. Important historical features existing at the Presidio would be interpreted for the public.

Archaeology Center

The Presidio Archaeology Lab is currently housed in Building 230 and will be displaced by the reconstruction of Doyle Drive. An expanded facility, the Presidio Archaeology Center (Archaeology Center), would be relocated to Buildings 44, 47, and 48 (three historic garages), Building 49 (a small historic residence), and the open space between the buildings. The Archaeology Center would include a lab and curation facilities. A small (500-square foot) addition would link two of the garages (Buildings 47 and 48) to create an accessible, climate-controlled lobby between the conservation lab and the curatorial storage facility. All archaeological work at the Presidio would be directed from the Archaeology Center and would provide the source material for youth-focused education as well as for adult volunteer programs. The programs would focus on the ongoing excavation and interpretation of the Spanish colonial El Presidio site.

Lodging

Pershing Hall (Building 42) would be rehabilitated to provide park visitors the experience of staying overnight in an historic building. The existing floor plan would be retained, requiring minimal changes to the building. The facility would include 22 rooms, a lobby, docent/meeting room space, kitchen and dining room, disabled access and two accessible units, and exterior patio on the southeast corner. The non-historic fire escape on the front of the building would be removed due to changes to the building interior that would provide a second means of egress. Buildings 40 and 41 would be used as dormitory-type accommodations for visiting students and others.

Presidio Theatre and Addition

The Presidio Theatre (Building 99) would be reused for its original purpose as a venue for performing arts and/or film. The historic building would be rehabilitated as a single auditorium, retaining its historic orientation to Moraga Avenue. A new addition of up to 18,000 square feet on the west side of the building would include two small theaters, new accessible restrooms, an office, and a lobby. The addition would be separated from the historic building by a transparent connector, and no

part of the new addition would extend higher than the eave of the existing structure.

Presidio Chapel and Addition

As an interfaith center and venue for ceremonies and commemorations, the historic Presidio Chapel (Building 130) would remain open as a public resource for special events and community use. A 4,000-square-foot addition (maximum) would be built on the west side of the building to provide new exhibition gallery and meeting space, accessible public restrooms, and an elevator to improve circulation between the addition, sanctuary, and basement. The addition's height would be limited to the sills of the west elevation windows, and its orientation would be perpendicular to the west wall of the sanctuary, allowing the majority of the west wall to be visible.

BUILDING CONSTRUCTION AND DEMOLITION

Building area in the district would increase from 1.148 million square feet (existing) to 1.215 million square feet. New construction would include a 50,000-square-foot office between the Old Parade and Main Parade south of Building 34, and 24,000 square feet of construction that has occurred since the PTMP was implemented in 2002. Demolition would include Building 211, buildings demolished since the PTMP was implemented (2,263 square feet), and buildings to be demolished for replacement of Doyle Drive[19] (32,259 square feet). Figure 2 illustrates building construction and demolition under Alternative 1.

Office (South of Building 34 Site)

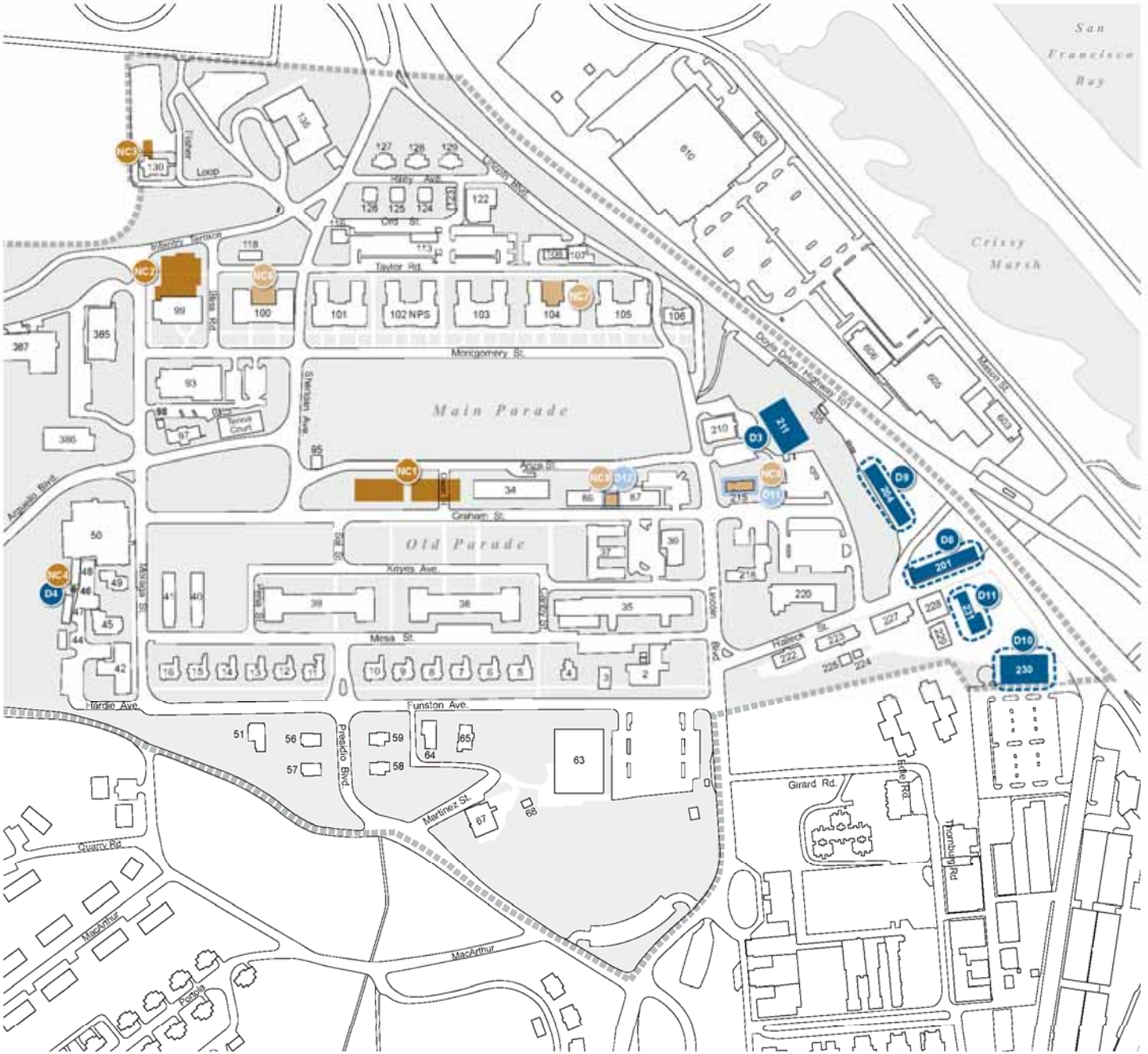
The 50,000-square-foot office building between the Main Parade and Old Parade would align with Buildings 86 and 87. The building would be broken into two volumes of 120 feet in length, which is the same length as both Buildings 86 and 87. The southernmost building would be two stories tall, and the northernmost building would be three stories tall, with a maximum height of 45 feet (comparable in height to Buildings 35, 38, and 39.

[19] *Doyle Drive is a critical section of U.S. Highway 101 that connects San Francisco to the Golden Gate Bridge along the Presidio's northern waterfront. Originally constructed in 1936, the roadway is nearing the end of its useful life. The Federal Highway Administration, the California Department of Transportation, and the San Francisco County Transportation Authority are improving the roadway's seismic, structural, and traffic safety while better incorporating the roadway into the setting of the Presidio as a national park. The project will replace Doyle Drive with a parkway placed in cut-and-cover tunnels at two critical points to reopen Presidio vistas and reconnect the waterfront to the Main Post and the rest of the Presidio. The final environmental impact statement/report (EIS/R) was circulated in September 2008 (San Francisco County Transportation Authority 2008). Construction began in the fall of 2009.*

(continued)

Proposed New Construction (NC)	
NC1 Offices	50,000 SF
NC2 Presidio Theatre	18,000 SF
NC3 Presidio Chapel	4,000 SF
NC4 Heritage Center / Arch Lab	500 SF
Incidental New Construciton	8,000 SF
Total	**80,500 SF**
New Construction Since PTMP	
NC5 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**104,500 SF**

Proposed Demolitions (D)	
D3 Building 211	9,294 SF
D4 Building 46	50 SF
Total	**9,344 SF**
Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**43,866 SF**



0 400 FT

Source: Presidio Trust 2010

OPEN SPACE

The Main Parade would be rehabilitated to establish the parade ground as the Presidio's central gathering place, to improve both its appearance and accessibility, and to enhance its connection to the park as a whole.[20]

Other historically significant open spaces and designed landscape features such as the Old Parade, Pershing Square, the Alameda entrance, the Presidio Chapel landscape, and streetscapes (Infantry Terrace, Halleck Street, Montgomery Street, and Funston Avenue) would be enhanced. As described in the final Doyle Drive Environmental Impact Statement/Report (EIS/R), the reconstruction of Doyle Drive would add 10 acres of open space to the north end of the Main Post. This additional open space would contain lawns and other landscaping, trails, and passive recreational opportunities. Pedestrian and visual connections to Crissy Field would link the Main Post to the waterfront. Paths and walks on the new slope would reconnect the Main Post to Crissy Field. Surface drainage and native riparian habitat would be restored in Tennessee Hollow on the eastern edge of the district.

El Presidio

The historic Spanish and Mexican quadrangles of El Presidio would be delineated to commemorate the archaeological site. Buildings 40 and 41 and existing parking would remain.

RECREATIONAL FACILITIES

Existing facilities, including the Presidio Community YMCA Fitness Center (Building 63), Presidio Bowling Center (Building 93), and Infantry Terrace and Main Post tennis courts would be retained for active recreational uses. A network of pedestrian and multi-use trails through the Main Post would be constructed as part of continuous corridors. The Anza Esplanade, stretching from the Officers' Club to Crissy Field, would create a new pedestrian corridor linking key Presidio visitor destinations in the Main Post and Crissy Field districts and several major Presidio trails (Golden Gate Promenade/Bay Trail, Presidio Promenade, and Ecology Trail). The Presidio Promenade would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

CIRCULATION AND PARKING

Lincoln Boulevard and Arguello Boulevard would be maintained as the primary entrance roads to the district. Several measures would be taken to simplify the roadway network, clarify vehicular circulation, and improve pedestrian circulation at the Main Post. Anza Street would be converted into the pedestrian Anza Esplanade. Sheridan Avenue between

[20] *The Trust's Main Parade project will rehabilitate the existing seven-acre surface parking lot into a major new park landscape to reinforce the Main Post as the "heart of the Presidio." The project will reveal and "green" the parade ground to create a new venue for public uses, including performances, special events, and everyday activities. The project includes conversion of historic Anza Street into the Anza Esplanade, which will serve as a pedestrian walkway connecting landscaped terraces that incorporate new venues for interpretive features that tell the story of the Presidio's history, and special events. The esplanade will maintain the historic width and alignment of Anza Street and use historically compatible paving materials so that it still "reads" as a roadway. The environmental assessment for the project was completed in November 2007.*

Montgomery Street and Graham Street and Arguello Boulevard between Sheridan Avenue and Moraga Street would be closed to vehicles as well and used as pedestrian circulation routes.

The large, central parking lot on the Main Parade would be replaced with smaller, peripheral parking lots to better serve the district. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,800 cars would be maintained in the new lots (excluding Infantry Terrace). The number of district parking spaces would be reduced from current levels by approximately 200 spaces. Parking on El Presidio would remain. With few exceptions, tenants would share available parking and would not receive "assigned" parking spaces. Each tenant's parking would be located within a reasonable walking distance (typically 1,500 feet or a five-minute walk). Sufficient parking would be provided for tenants and visitors, but the parking supply would be regulated with fees and time restrictions. Proposed circulation and parking are shown in Figure 3.

2.2 Alternative 2: Main Post Update (Mitigated Preferred Alternative)

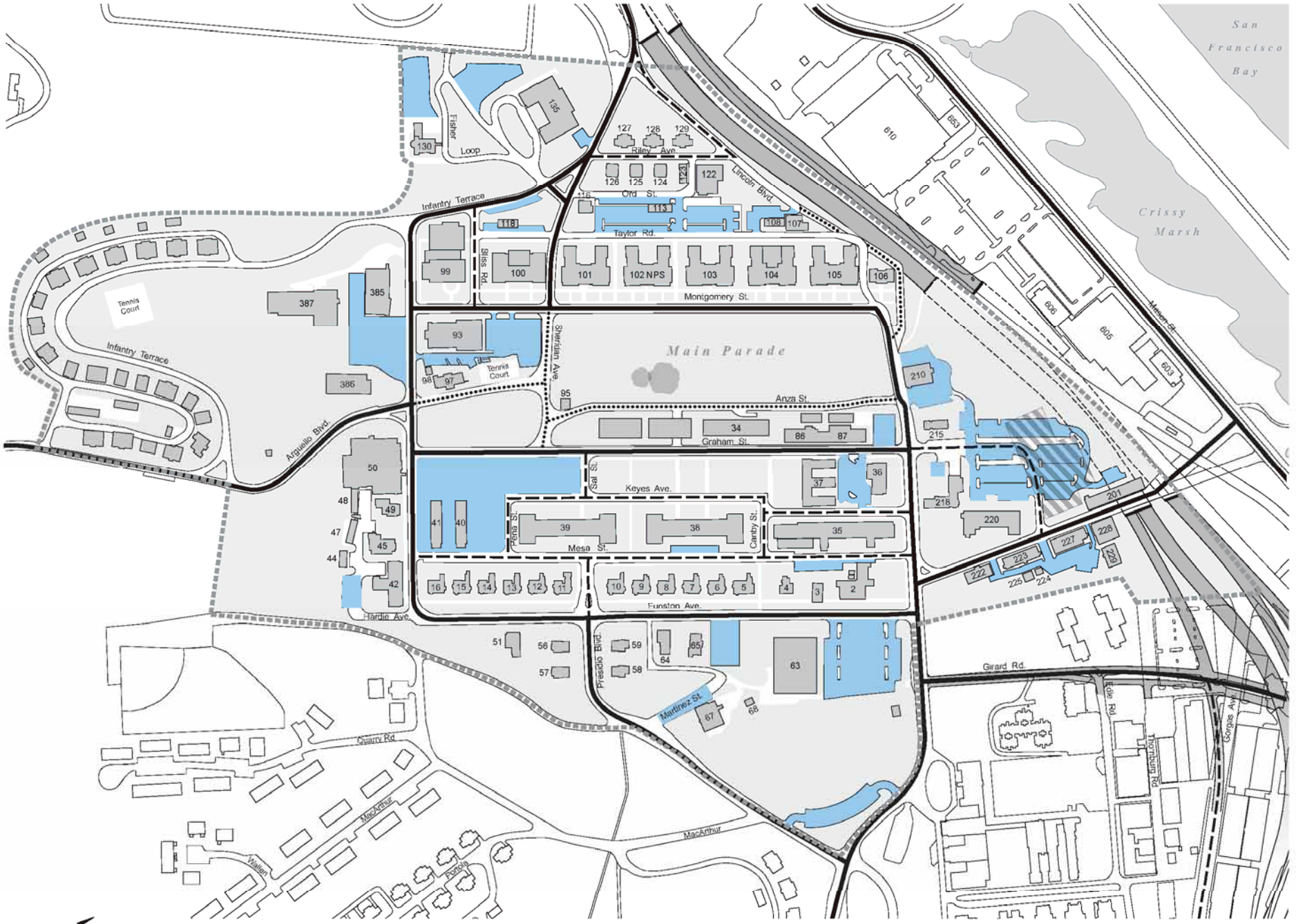
The Trust has identified the mitigated preferred alternative as the alternative that best fulfills the vision of the Main Post as the heart of a great national park site, which the Trust articulated in the PTMP. In developing the mitigated preferred alternative, the Trust has taken into account public and agency comments received on the draft SEIS that was issued in June 2008, and the supplement to the draft SEIS that was circulated in March 2009, and has incorporated "modifications to the undertaking" brought about through the consultation process required by Section 106 of the NHPA.

The mitigated preferred alternative carries the Trust's vision forward with greater specificity but makes some changes to both the amount of building demolition and new construction, with the net effect of reducing the amount of built space in the Main Post from that called for in the PTMP. It also changes the distribution of land uses, with more public uses and less office and residential uses.

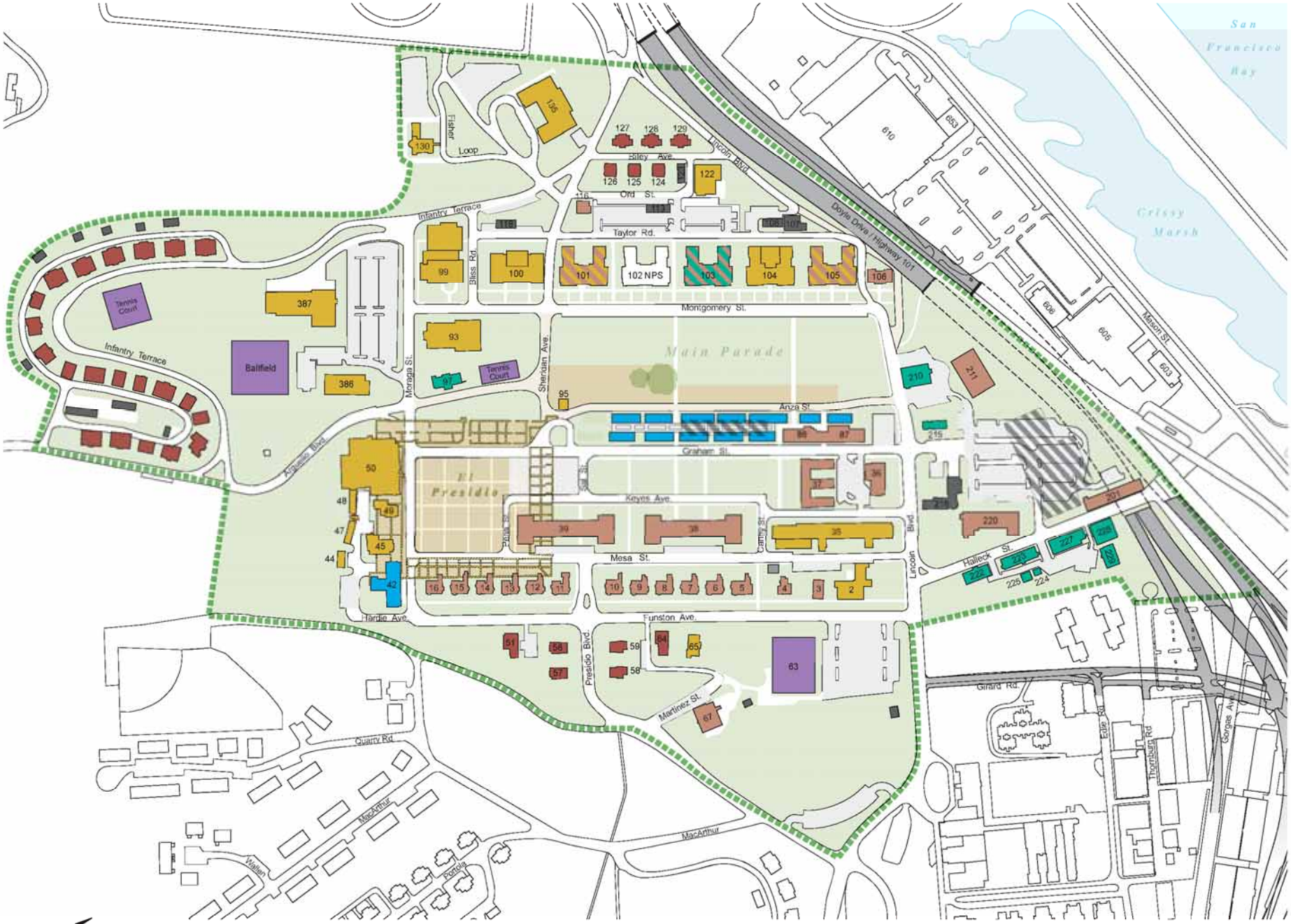
While the Trust believes the mitigated preferred alternative is the one that would best fulfill its statutory mission and responsibilities, the agency has not made a final decision nor committed to approve or execute proposals described in the alternative. The alternative that is ultimately selected for implementation may combine various elements of all the alternatives, or may fall within the range they represent. The final decision will be presented in a record of decision (ROD), which is the culmination of the NEPA process. Until the NEPA process is concluded, no final approvals may be granted and no development agreement or lease may be signed for any of the actions under review in the final SEIS.

CONCEPT

Under this alternative, proposals and improvements would be undertaken to achieve the Trust's vision of the Main Post as the heart of the Presidio (Figure 4). The Main Post would become a welcoming place that serves the community, with the Presidio's history visible and interpreted, and with 21st century green practices used to conserve energy and resources and to rehabilitate its buildings. Archeological excavation of El Presidio would unlock the history of the Presidio's founding; landscape treatment would reflect the structure of the buried site and outline the open space of



Source: Presidio Trust 2010


Main Parade
El Presidio
Infantry Terrace
Montgomery St.
Taylor Rd.
Old St.
Anza St.
Graham St.
Keyes Ave.
Mesa St.
Funston Ave.
Lincoln Blvd.
Doyle Drive / Highway 101
Sheridan Ave.
Moraga St.
Arguello Blvd.
Presidio Blvd.
Quarry Rd.
MacArthur
Girard Rd.
Mason St.
Thornburg Rd.
Gorgas Ave.
Halleck St.
Martinez St.
Tennis Court
Ballfield
San Francisco Bay
Crissy Marsh
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

the original *plaza de armas*. A Heritage Center in the nearby Officers' Club would offer opportunities to explore the history of the Presidio and the American West and would house the education facilities of the Archaeology Center. The new Presidio Lodge would welcome visitors and animate the Main Parade.

PUBLIC USES

Approximately 48 percent (576,000 square feet) of the building space in the district, including the first floors of the Montgomery Street Barracks (Buildings 100, 101, 103, 104, and 105)[21], would be devoted to public uses. Cultural and educational facilities and programs would include the Presidio Theatre (Building 99) and addition, the Presidio Chapel (Building 130) and addition, a Heritage Center in the Officers' Club (Building 50), the Presidio Archaeology Center (Buildings 44, 47, 48, and 49), the site south of the Main Parade (Building 93), the Walt Disney Family Museum (Buildings 104, 108, and 122) and the Presidio Child Development Center (Building 387). Existing meeting and special event facilities would be retained in the Golden Gate Club (Building 135) and in a portion of the Officers' Club. Approximately 59,000 square feet of food and retail services would be provided, including a bank, post office, cafes, transit center, and restrooms. Additional community services would be located along Halleck Street. A new park lodge (Presidio Lodge) between the Old and Main Parade grounds would provide overnight accommodations (up to 110 rooms) for guests as well as amenities for all visitors. More information on proposed public uses is provided below.

Lodge (On and South of Building 34 Site)

The Presidio Lodge would be located on the site occupied by Building 34, between the Old Parade and the Main Parade, bounded by Graham Street on the east and the proposed Anza Esplanade on the west. Building 34 would be demolished and replaced with no more than 70,000 square feet of construction. The building footprint would approximate the pattern of the historic barracks that once occupied the site between Graham Street and Anza Street. The lodge would have a maximum height of 30 feet above existing grade, and may have one basement level below grade at the Building 34 site for underground parking. The southern edge of new construction would be set back at least 150 feet from Building 95. Public spaces on the ground floor such as a lobby, bar, restaurant, and outdoor terraces would be open to the public. Recently rehabilitated Buildings 86 and 87 may be converted from offices and incorporated into the lodge. Currently vacant Building 42 (Pershing Hall) would also be rehabilitated as lodging.

Heritage Center (Building 50)

A Heritage Center located in the Officers' Club (Building 50) would be a destination for visitors to learn about the history of the Presidio and the American West. Exhibition space would display permanent and changing exhibits, and a small theater in a non-historic portion of the building would feature a film about the Presidio's history. Visitors would be encouraged to explore the entire Main Post as a "museum without

[21] *Building 102 is under the jurisdiction of the National Park Service (NPS). The NPS manages the 323 coastal acres (Area A) of the Presidio.*

walls."[22] A variety of interpretive media would be developed to engage diverse audiences. New meeting spaces would allow the Officers' Club to continue to be available for a variety of public uses. The building would be brought into compliance with accessibility and life-safety codes, as well as current energy conservation standards.[23] Accessibility upgrades would improve functionality and make the building more welcoming to the public. Selective demolition of non-historic elements would reveal more of the historic building. Confusing circulation patterns and obsolete non-historic features would be eliminated.

Site South of the Main Parade

The Presidio Bowling Center (Building 93) and the former Red Cross building (Building 97) would continue to be used for public purposes. The tennis court adjacent to the Presidio Bowling Center would be retained for active recreational use. Building 98 would be removed.

Other Public Uses

The Presidio Archaeology Center, Presidio Theatre and addition, Presidio Chapel and addition, and Pershing Hall would be the same as under Alternative 1.

[22] *A description of the Heritage Center is provided in the draft Presidio Heritage Program: A Museum without Walls (Frankel 2008) available in the Presidio Trust Library.*

[23] *Green building practices would achieve a LEED Silver rating or higher.*

BUILDING CONSTRUCTION AND DEMOLITION

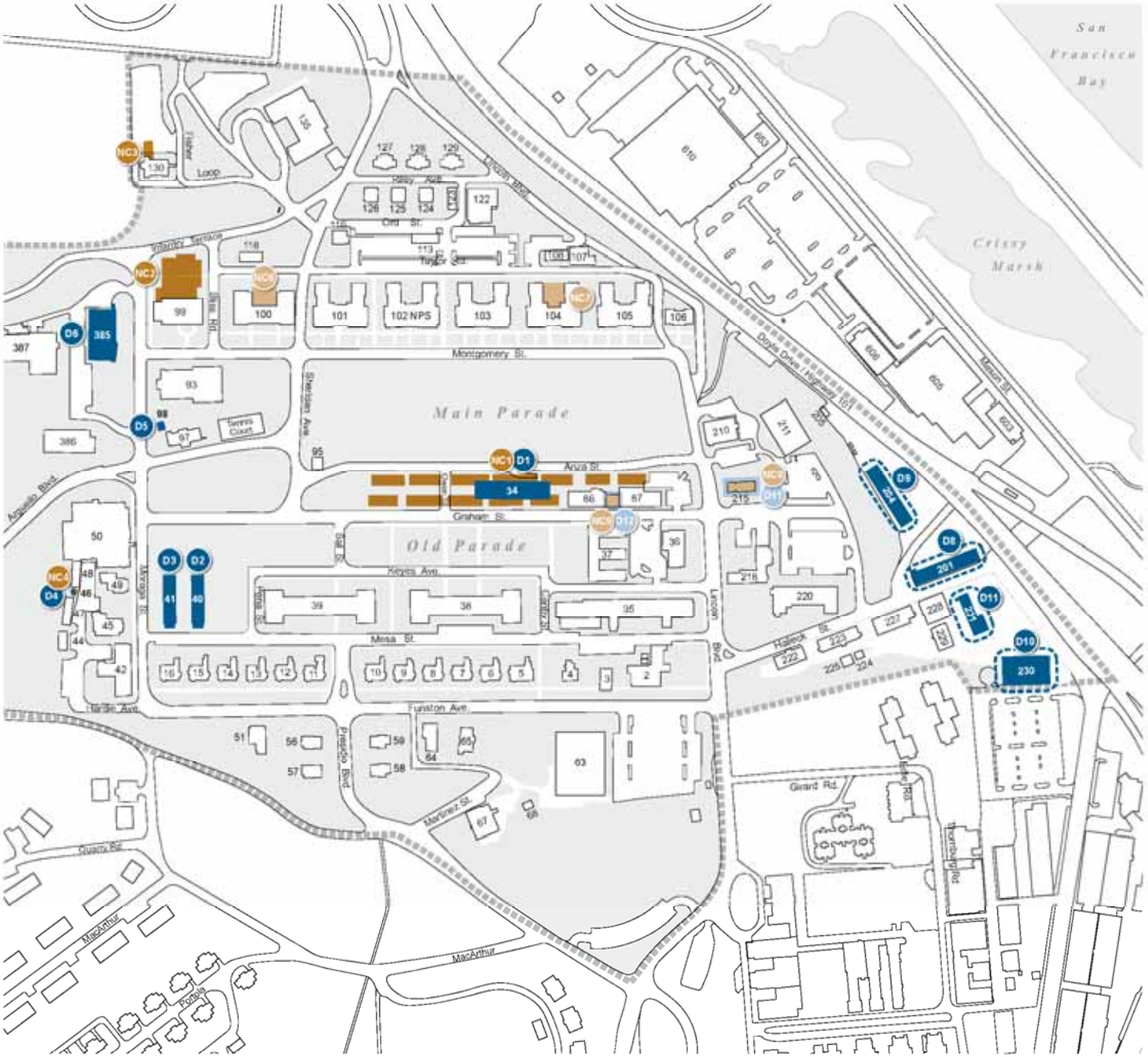
Under this alternative, building area in the district would decrease from 1.215 million square feet (under the PTMP taking into account building demolition required for the Doyle Drive project) to 1.201 million square feet. New construction would include the 70,000-square-foot Presidio Lodge, a 500-square-foot addition for the archeology lab and curation facilities, building additions to the Presidio Theatre (18,000 square feet) and Presidio Chapel (4,000 square feet), and 30,000 square feet of incidental new infill construction or new construction to support the rehabilitation of historic buildings. Up to 94,000 square feet of buildings would be demolished, including Building 34 (31,824 square feet) and Building 385 (10,580 square feet), buildings demolished since the PTMP was implemented (2,263 square feet), and buildings to be demolished for replacement of Doyle Drive (32,259 square feet). Buildings 40 (8,216 square feet) and 41 (8,298 square feet) would be removed or relocated pending further consultation under the NHPA Section 106. Figure 5 illustrates building construction and demolition figures under Alternative 2.

OPEN SPACE

As analyzed in the Main Parade environmental assessment, the historic Main Parade will be rehabilitated as a public open space and parking will be located around the periphery, further increasing the district's open space. Other historically significant open spaces and designed landscape features would be retained and enhanced. The reconstruction of Doyle Drive would create additional open space along the bluff at the Main Post's northern edge. Restoration of Tennessee Hollow on the district's

Proposed New Construction (NC)	
NC1 Lodge	70,000 SF
NC2 Presidio Theatre	18,000 SF
NC3 Presidio Chapel	4,000 SF
NC4 Heritage Center / Arch Lab	500 SF
Incidental New Construction	30,000 SF
Total	**122,500 SF**
New Construction Since PTMP	
NC5 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**146,500 SF**

Proposed Demolitions (D)	
D1 Building 34	31,824 SF
D2 Building 40	8,216 SF
D3 Building 41	8,298 SF
D4 Building 46	50 SF
D5 Building 98	449 SF
D6 Building 385	10,580 SF
Total	**59,417 SF**
Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**93,939 SF**



0 400 FT

Source: Presidio Trust 2010

eastern edge would expand riparian habitats and would reestablish a connection to Crissy Marsh.

El Presidio

The site of El Presidio would be delineated and commemorated. Buildings 40 and 41 would be removed or relocated to re-establish the spatial character of El Presidio's *plaza de armas*, and parking would be reduced from 252 to 75 daily spaces. Removable bollards would allow for periodic closure of Graham Street and Moraga Avenue to redirect traffic around the site during excavations and programs.

RECREATIONAL FACILITIES

Under this alternative, the Infantry Terrace tennis courts, the tennis court adjacent to the Bowling Center, and the YMCA Fitness Center would remain. A new athletic field would be constructed on the Building 386 site north of Infantry Terrace. The Presidio Bowling Center would be relocated out of Building 93 and would be removed from the district. A network of pedestrian and multi-use trails would be constructed through the Main Post. The Anza Esplanade, stretching from the Officers' Club to Crissy Field, would create a new pedestrian corridor linking key Presidio visitor destinations in the Main Post and Crissy Field districts and provide a connection to several major Presidio trails (Golden Gate Promenade/Bay Trail, Presidio Promenade, and Ecology Trail). The Presidio Promenade would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

CIRCULATION AND PARKING

Lincoln Boulevard and Arguello Boulevard would be maintained as the primary entrance roads to the district. Several measures would be taken to simplify the roadway network, clarify vehicular circulation, and improve pedestrian circulation at the Main Post. Anza Street would be converted into the pedestrian Anza Esplanade, as described in the Main Parade environmental assessment. Sheridan Avenue between Montgomery Street and Graham Street, Lincoln Boulevard between Montgomery Street and Building 105, and Arguello Boulevard between Sheridan Avenue and Moraga Avenue would be used as pedestrian circulation routes. The width, alignment, and paving materials for roads converted to pedestrian use would be historically compatible. Several roads through El Presidio, including Graham Street, Moraga Avenue, and Mesa Street, would be periodically closed to facilitate excavations and public programs.

In an effort to serve the Main Post district as a whole, parking would largely be located in perimeter lots around the Main Post. Underground parking may be constructed beneath the Presidio Lodge (50 spaces maximum) and in a garage under the reconstructed north bluff adjacent to Doyle Drive (300 spaces maximum), although the total number of underground spaces would be no more than 300 spaces. Existing street parking would be preserved and new street parking may be added. Parking for an estimated 1,900 cars (excluding Infantry Terrace) would be developed in an effort to balance supply with demand. Parking supply would be managed with fees and time restrictions to minimize demand and encourage the use of alternative means of transportation. The Trust would continue to monitor parking occupancy to evaluate supply and demand conditions over time. Additional PresidiGo shuttle service would

be needed to keep pace with demand as buildings are rehabilitated and occupied throughout the Main Post. The shuttle would link the Presidio with other local and regional transit systems. Proposed circulation and parking are shown in Figure 6.

2.3 Alternative 3: History Center

This alternative is derived from a proposal submitted by the Presidio Historical Association to build a 48,000-square-foot History Center at the Main Post.[24]

CONCEPT

A new History Center at the site south of the Main Parade would be the primary interpretive facility, serving as both "an anchor and a portal" to receive and orient visitors to the historic Main Post (Figure 7). Preference would be given to those uses that perpetuate the Presidio's military legacy and tradition, provide opportunities for joint resource preservation programs, and/or enrich educational and other program elements. Tenants would be selected over the long term based on their ability to support park programs and activities and retain the district's sense of community and the past.

PUBLIC USES

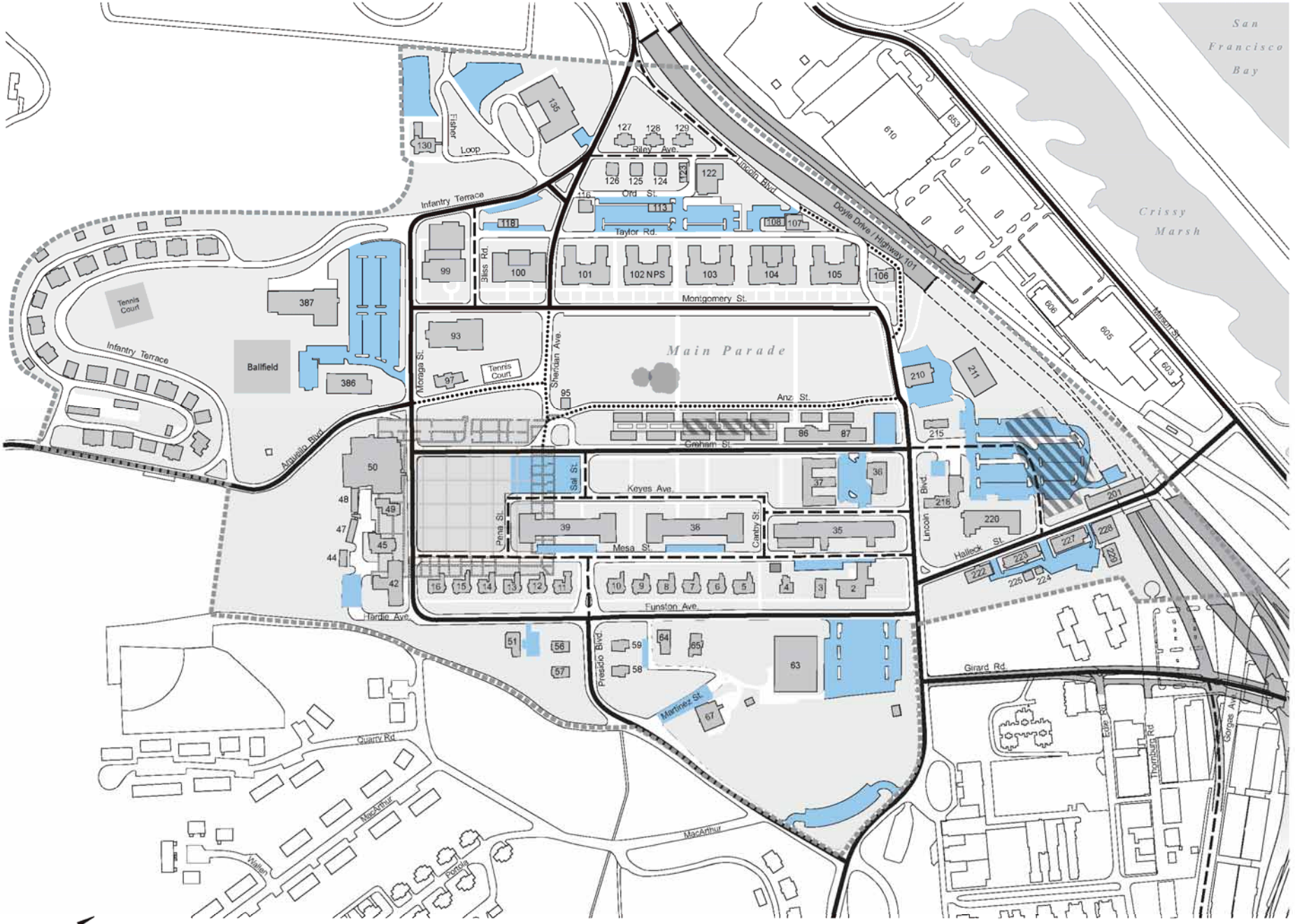
Approximately 40 percent (464,000 square feet) of the building space in the district would be devoted to visitor use to welcome the public. Cultural and educational facilities would be similar to those proposed under Alternative 1, except that limits on new construction would preclude the Presidio Theatre addition and a History Center adjacent to the southern end of the Main Parade (see below) would replace the Heritage Center in Building 2. In addition to a small hotel in Pershing Hall, B&B-style inns (up to 36 rooms) would be offered in the upper Funston Avenue Officers' Quarters (Buildings 11-16).

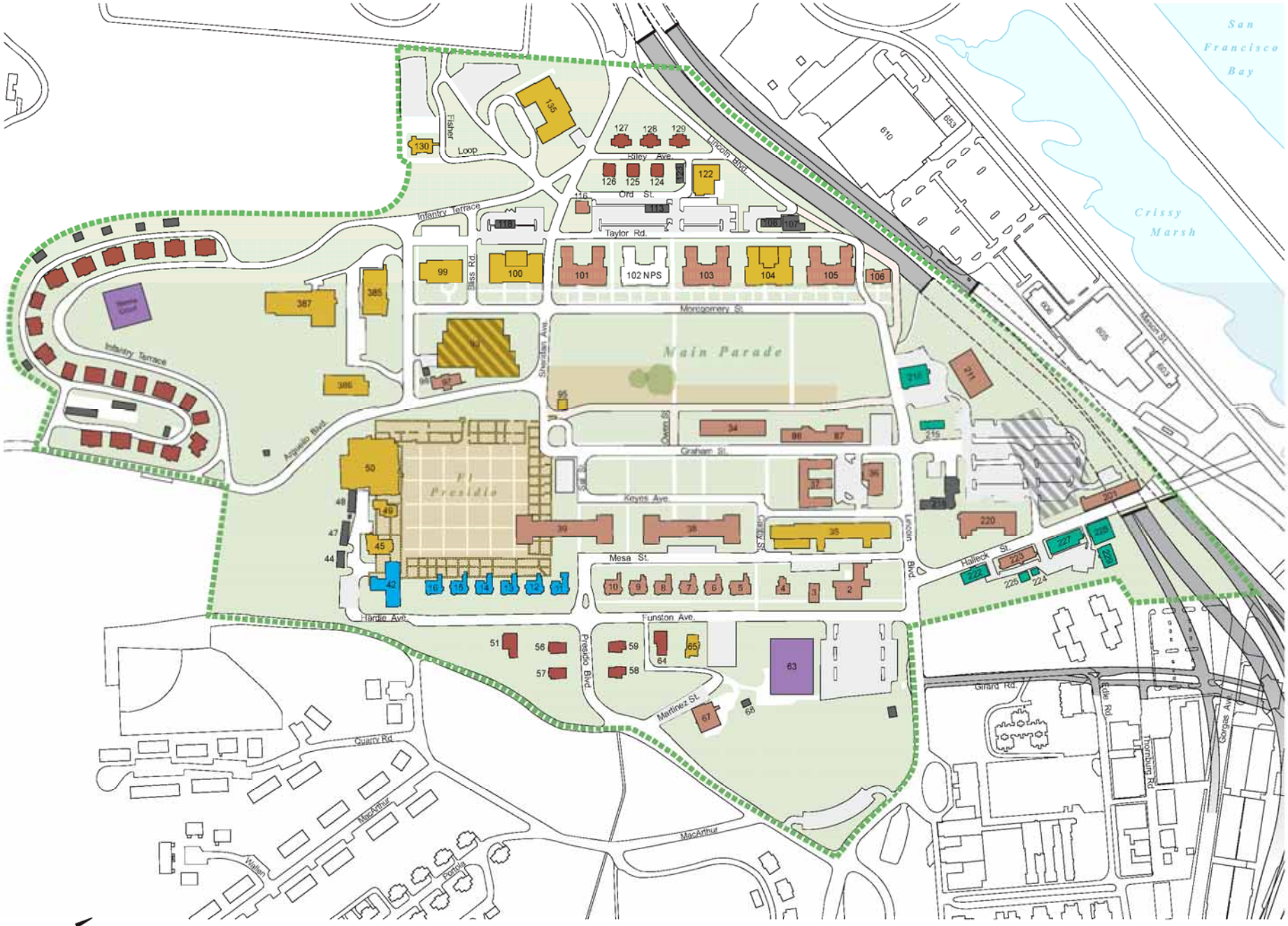
History Center (Site at the Head of the Main Parade)

A 48,000-square-foot History Center located at the southern end of the Main Parade would be the centerpiece of this alternative. The design of the museum would echo the surrounding historic structures, emphasize sustainable principles and energy conservation,[25] and allow for the construction of approximately 100 parking spaces below the building. Key features of the museum would include a lobby and orientation center, exhibit galleries organized around themes and using a variety of experience design technologies, a temporary exhibit gallery, classrooms, a central atrium for special events, and a retail store. The proposal did not identify a collection for the museum.

[24] *A complete description of the proposal is provided in the Proposal for a Cultural Institution at the Presidio Main Post, A History Center at the Golden Gate (Presidio Historical Association, no date) available for review in the Presidio Trust Library. The proposal remains unfunded to date.*

[25] *Green design features would include passive solar storage, a photovoltaic skin, sod roof, and use of recycled materials.*


San Francisco Bay
Crissy Marsh
Main Parade
Lincoln Blvd.
Doyle Drive / Highway 101
Infantry Terrace
Tennis Court
Ballfield
Arguello Blvd.
Moraga St.
Sheridan Ave.
Montgomery St.
Anza St.
Graham St.
Keyes Ave.
Mesa St.
Funston Ave.
Hardie Ave.
Riley Ave.
Ord St.
Taylor Rd.
Sal St.
Pena St.
Canby St.
Lincoln Blvd.
Hallleck St.
Presidio Blvd.
Martinez St.
Girard Rd.
Quarry Rd.
MacArthur
Marshall
Portola
Mason St.
Gorgas Ave.
Thornburg Rd.
Edie Rd.
0
400 FT
N
Source: Presidio Trust 2010
Main Post Planning District
Primary Road
Secondary Road
Road to be Pedestrianized
Surface Parking
Below-Grade Parking


San Francisco Bay
Crissy Marsh
Main Parade
El Presidio
Infantry Terrace
Infantry Terrace
Angulo Blvd
Fisher Loop
Lincoln Blvd
Riley Ave
Ord St.
Taylor Rd.
Bliss Rd.
Sheridan Ave
Montgomery St.
Graham St.
Keyes Ave.
Mesa St.
Lincoln Blvd.
Halleck St.
Funston Ave.
Hardie Ave.
Presidio Blvd.
Martinez St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Quarry Rd.
MacArthur
MacArthur
Marion St.
Wallen
Portola
99
100
101
102 NPS
103
104
105
106
107
108
122
125
126
127
128
129
130
135
385
386
387
610
653
605
606
603
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

BUILDING CONSTRUCTION AND DEMOLITION

Building area in the district would decrease from 1.215 million square feet to 1.161 million square feet. New construction (since 2002) would include the 48,000-square-foot History Center south of the Main Parade, and the 24,000 square feet of construction that has occurred since the PTMP was implemented. Demolition would include up to 64,000 square feet of buildings, including 12,800 square feet within the Presidio Bowling Center (Building 93), 32,259 square feet of buildings required to reconstruct Doyle Drive, and 2,263 square feet already demolished since the PTMP was implemented in 2002. Building construction and demolition are shown in Figure 8.

OPEN SPACE

Within the Main Post's public open space, military pageantry would commemorate traditions of the Presidio's military history. Open space features under this alternative would be similar to those under Alternative 1, except for commemoration of El Presidio; under Alternative 3, Buildings 40 and 41 would be removed, the archeological site would be closed to traffic, and parking would be eliminated.

RECREATIONAL FACILITIES

The Infantry Terrace tennis courts and the YMCA Fitness Center would be retained for use. The Presidio Bowling Center and adjacent tennis court would be demolished. Pedestrian and multi-use trails within the district would be improved.

CIRCULATION AND PARKING

Vehicular traffic on the portion of streets bordering El Presidio, including Moraga Avenue (east of Arguello), Graham Street (south of Sheridan), Mesa Street (south of Presidio), Keyes Avenue (south of Sal), and Pena Street would be eliminated to establish the archaeological site as a pedestrian zone. Within the surrounding area, Sheridan Avenue between Montgomery Street and Graham Street and Arguello Boulevard between Sheridan Avenue and Moraga Street would remain open to vehicles.

Similar to Alternative 1, parking on the Main Parade would be replaced with smaller, peripheral parking lots to better serve the district. Additionally, underground parking may be constructed in a garage under the reconstructed north bluff adjacent to Doyle Drive. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,890 cars would be maintained in the new lots (excluding Infantry Terrace) to meet tenant and visitor needs. No parking would be made available within the site of El Presidio. Proposed circulation and parking are shown in Figure 9.

2.4 Alternative 4: Status Quo

This alternative was developed at the request of several commentors during scoping of the SEIS and represents a pragmatic management direction for the Main Post. Site improvements would be limited to those undertaken as part of other ongoing Trust plans, programs, or projects.[26]

[26] *Such as the Main Parade, Doyle Drive, Tennessee Hollow, and the Presidio Trails and Bikeways Master Plan.*

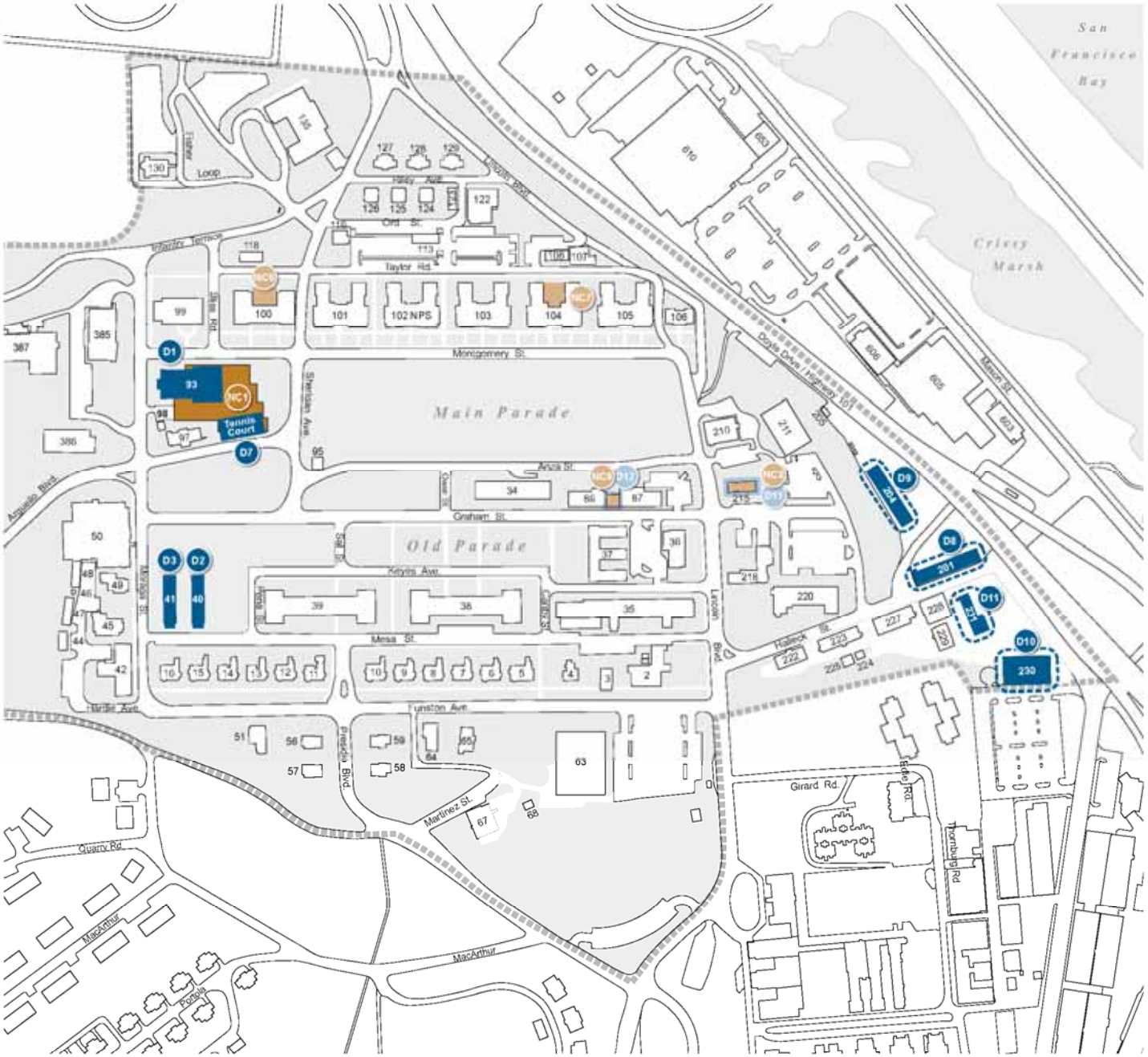
Proposed New Construction (NC)	
NC1 History Center	50,000 SF
Incidental New Construction	3,000 SF
Total	**53,000 SF**

New Construction Since PTMP	
NC2 Int'l Center to End Violence	3,000 SF
NC3 Disney Family Museum	18,000 SF
NC4 Transit Center	2,000 SF
NC5 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**77,000 SF**

Proposed Demolitions (D)	
D1 Building 93	12,800 SF
D2 Building 40	8,216 SF
D3 Building 41	8,298 SF
D7 Tennis Court	N/A
Total	**29,314 SF**

Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**

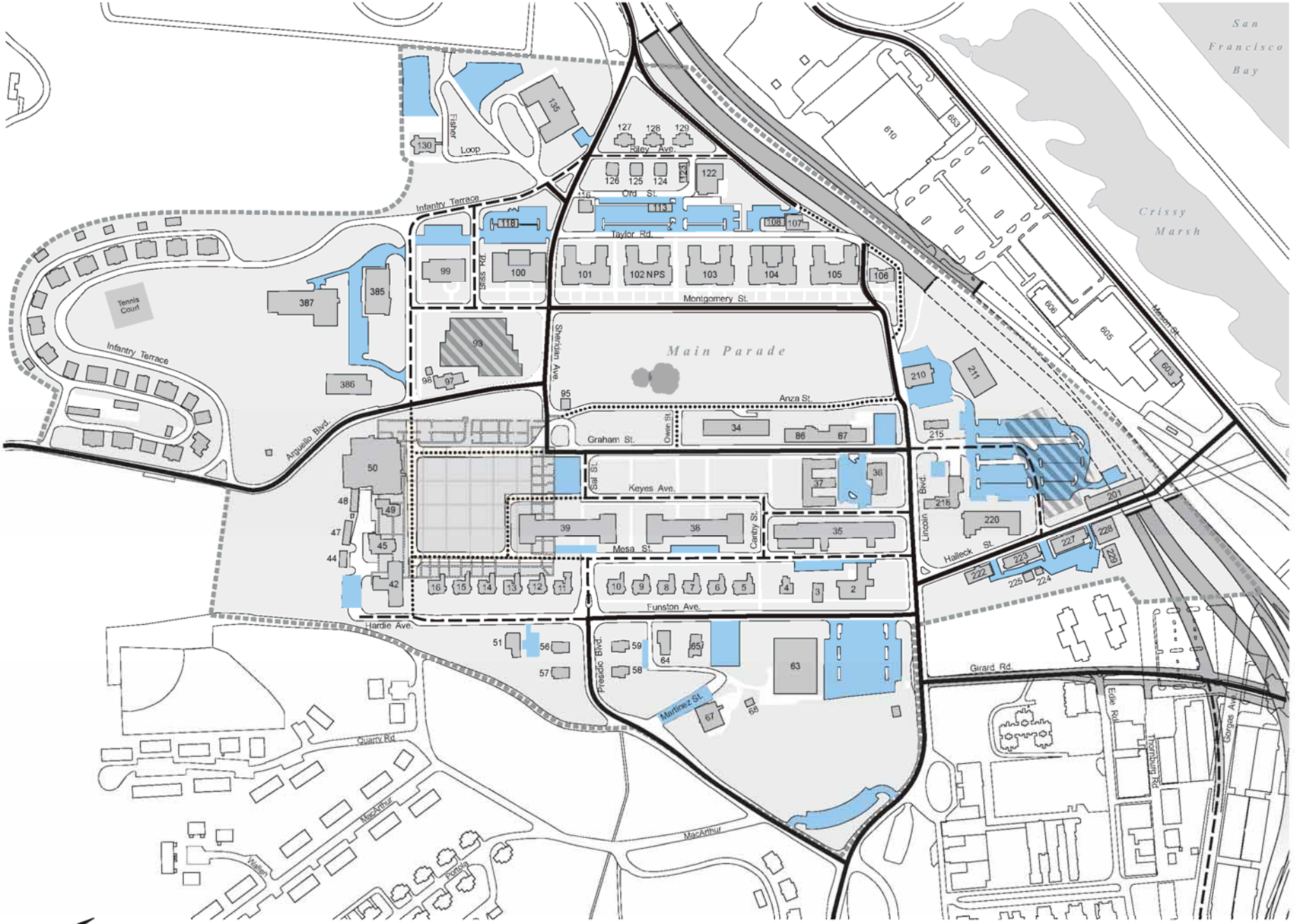
Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**63,836SF**



N

0 400 FT

Source: Presidio Trust 2010



Source: Presidio Trust 2010

To a large extent, the environmental characteristics of this alternative would be generally as described in the affected environment discussions in Section 3.

CONCEPT

Under this alternative, no significant park enhancements or physical change beyond that already permitted or underway would occur in the district, i.e., there would be no further building demolition or new construction and existing buildings and activities would remain (Figure 10). Buildings would be rehabilitated to meet essential code requirements, consistent with the Secretary of the Interior's Standards, and then leased out for the highest and best use (generally mixed-use office). Tenants that could help fund the preservation and enhancement of the Presidio's resources and meet the community service needs of the park's visitors, tenants, and residents would be sought. If tenants could not be identified after reasonable time and effort, the buildings would be deactivated for an extended period of time, protected from weather, stabilized, and secured from vandalism as funding permits through a process known as mothballing.

PUBLIC USES

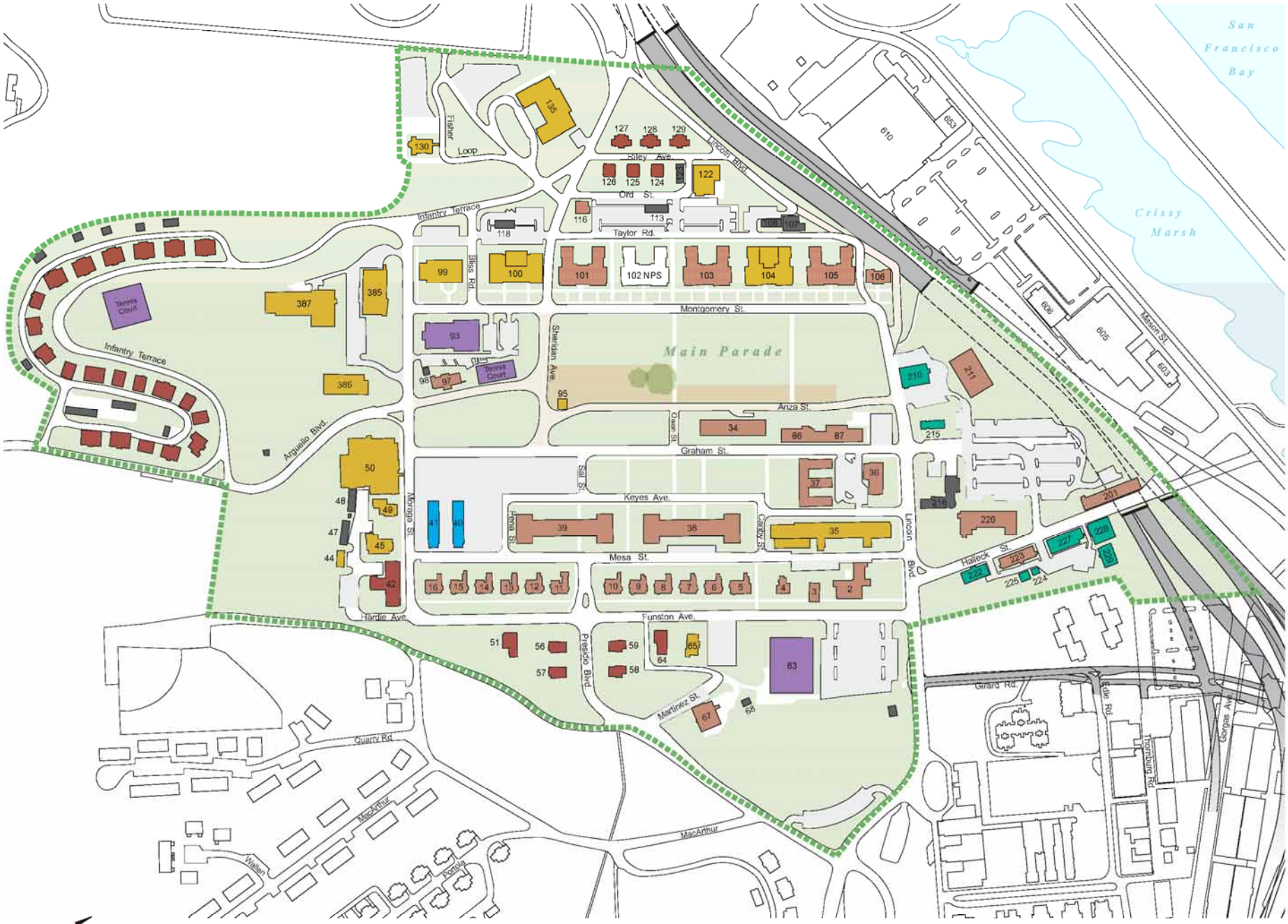
Under this alternative, there would be no cultural and educational facilities and programs beyond what exists or is currently planned. Approximately 393,000 square feet of building space would be used or dedicated to cultural activities and other public uses. These would include a Visitor Center in the Officers' Club (visitor information only), the Presidio Chapel, Herbst International Exhibition Hall, the Walt Disney Family Museum, the Presidio Child Development Center, and the Golden Gate Club. Tenants in leased buildings would have discretion in offering publicly available programs, which could involve stewardship and sustainability, cross-cultural and international cooperation, community service and restoration, health and scientific discovery, recreation, the arts, education, research, innovation, and/or communication. No lodging would be provided (Pershing Hall would be used for residential tenants).

BUILDING CONSTRUCTION AND DEMOLITION

Building demolition since the PTMP was implemented (post 2002) and the Doyle Drive reconstruction project would reduce the existing overall building area from 1.148 million square feet (2002) to 1.140 million square feet. New construction would be limited to approximately 26,000 square feet and would generally be associated with building additions recently completed or underway, including the Walt Disney Family Museum and the International Center to End Violence and a small café along the Anza Esplanade as described in the Main Parade EA. Future demolition would be limited to buildings to be demolished for replacement of Doyle Drive (32,259 square feet). Building construction and demolition are shown in Figure 11.

OPEN SPACE

Open space enhancements that are currently underway would continue, including the Main Parade, Doyle Drive, and Tennessee Hollow projects. Landscaped areas and small open spaces could be used for passive or informal recreation. Within the public open space, special events would be held periodically but would not increase above current levels. Commemoration of the site of El Presidio would be limited to interpretive panels.

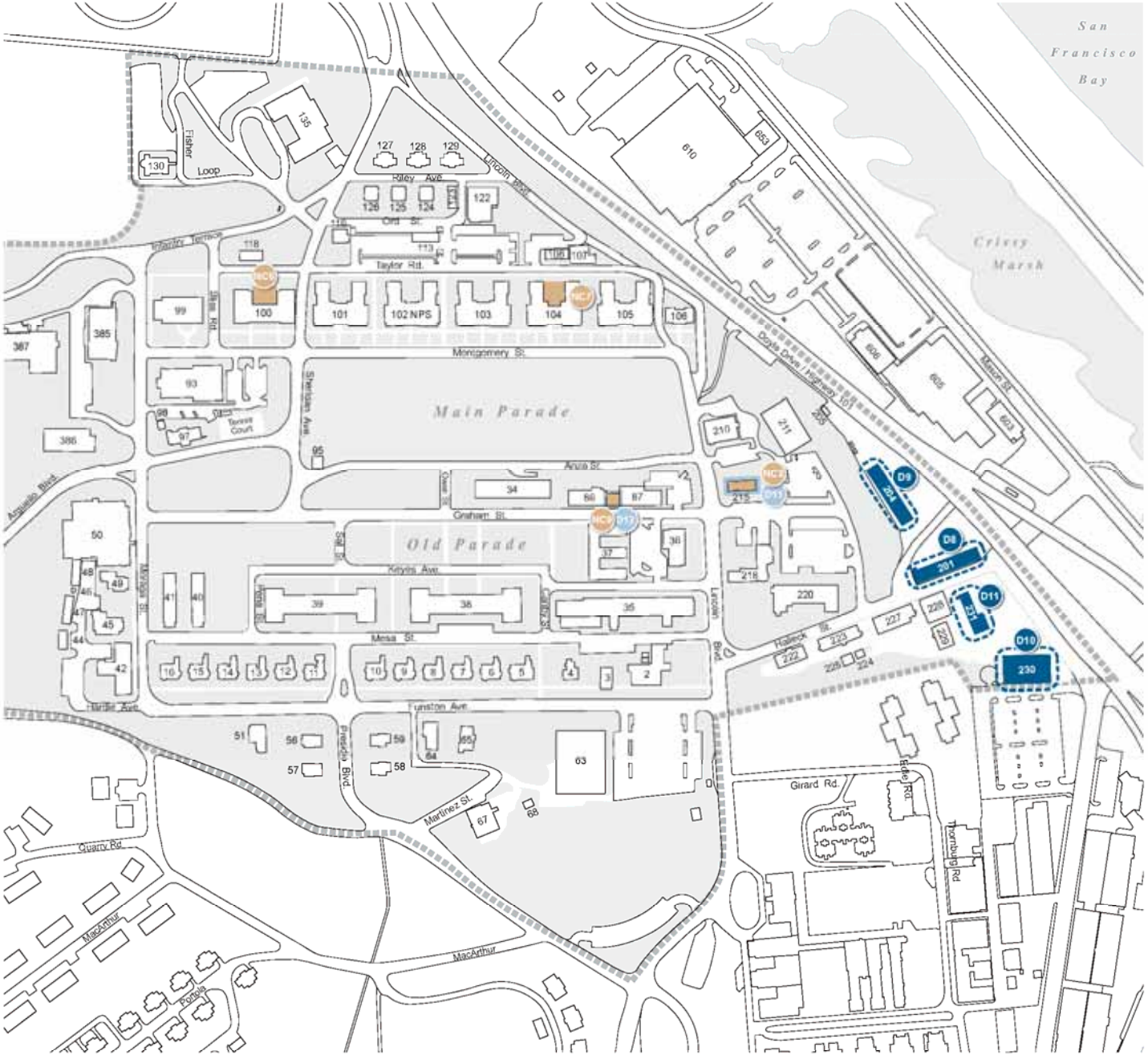

San Francisco Bay
Crissy Marsh
Main Parade
Infantry Terrace
Anguello Blvd.
Fisher Loop
Riley Ave.
Old St.
Taylor Rd.
Bliss Rd.
Montgomery St.
Sheridan Ave.
Anza St.
Graham St.
Sal St.
Keyes Ave.
Pond St.
Cowley St.
Mesa St.
Hardie Ave.
Funston Ave.
Presidio Blvd.
Martinez St.
Lincoln Blvd.
Halleck St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Quarry Rd.
MacArthur
Wallen
Pershing
Mason St.
Tennis Court
Tennis Court
102 NPS
0
400 FT
Source: Presidio Trust 2010
Main Post Planning District
Paved Pedestrian Area
Retail
Office
Residential
Recreation
Lodging
Infrastructure
Cultural / Educational
NPS
Surface Parking
Below-Grade Parking

Proposed New Construction (NC)	
Incidental New Construction	2,000 SF
Total	**2,000 SF**

New Construction Since PTMP	
NC6 Int'l Center to End Violence	3,000 SF
NC7 Disney Family Museum	18,000 SF
NC8 Transit Center	2,000 SF
NC9 Buildings 86 / 87 Infill	1,000 SF
Total	**24,000 SF**
TOTAL	**26,000 SF**

Buildings to be Demolished for Doyle Drive	
D8 Building 201 (half)	6,164 SF
D9 Building 204	12,193 SF
D10 Building 230	10,060 SF
D11 Building 231	3,842 SF
Total	**32,259 SF**

Buildings Demolished Since PTMP	
D11 Building 215	1,848 SF
D12 Building 85	415 SF
Total	**2,263 SF**
TOTAL	**34,522 SF**



Main Post Planning District
Proposed New Construction
Proposed Demolition
Buildings Demolished Since PTMP
New Construction Since PTMP
Doyle Drive Project Demolition

Source: Presidio Trust 2010

RECREATIONAL FACILITIES

Existing recreational facilities, including the tennis courts, Presidio Bowling Center, and YMCA Fitness Center, would be retained for use. Improvements to promote pedestrian and bicycle use consistent with the Presidio Trails and Bikeways Master Plan would be completed.

CIRCULATION AND PARKING

Measures taken to clarify vehicular circulation and improve pedestrian circulation at the Main Post would be similar to those under Alternative 1. Similar to Alternative 1, parking would be provided in smaller, peripheral parking lots within the district. Existing street parking would be preserved and new street parking would be added. Parking for an estimated 1,850 cars would be maintained and managed to reduce the demand for parking. Proposed circulation and parking are shown in Figure 12.

2.5 Other Alternatives

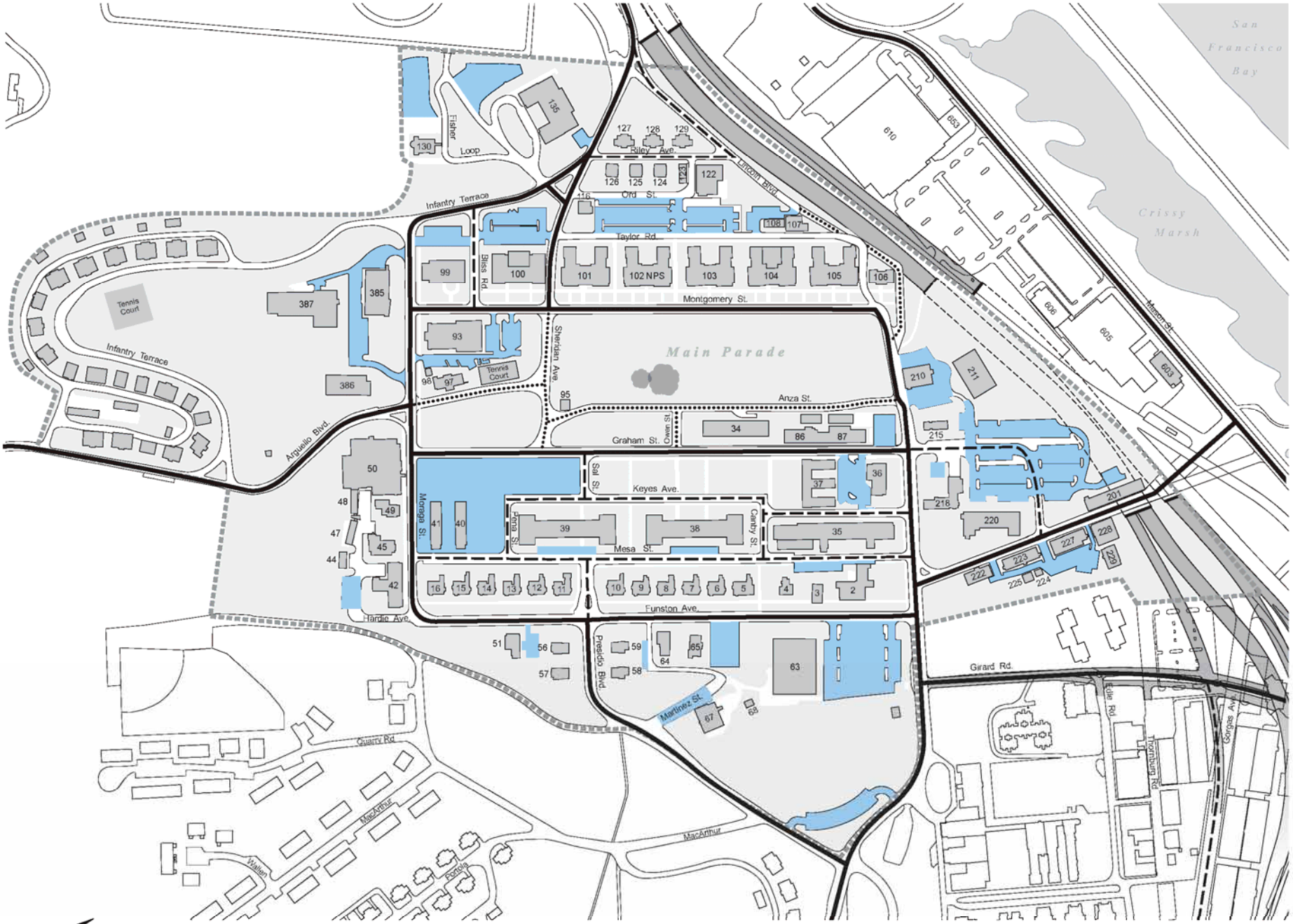
The following briefly summarizes additional alternatives that were previously considered by the Trust but have not been carried forward for detailed study in the final SEIS.

CULTURE AND HERITAGE CENTER

This alternative was formerly identified as the proposed action that was fully analyzed in the draft SEIS. This alternative was initially developed in part in response to several proposals presented to the Trust in 2007, including one to build a 100,000-square-foot museum of contemporary art (CAMP) to showcase a preeminent collection of contemporary art and include a major education program (in Building 101) at the Main Post. This alternative is no longer being considered because, following release of the draft SEIS, the alternative was modified as a result of the Trust's analysis of the proposals, considered public comment, and consultation under Section 106 of the National Historic Preservation Act. The Trust then elected to address the modified alternative as the preferred alternative in a supplement to the draft SEIS (see below) to best integrate and satisfy its NEPA and NHPA obligations.

BIRTHPLACE OF SAN FRANCISCO AND HEART OF THE PARK

This alternative was formerly identified as the preferred alternative that was fully analyzed in a supplement to the draft SEIS. This alternative combined elements of alternatives that were analyzed in the draft SEIS, and included approaches that attempted to avoid, minimize, or mitigate effects on the National Historic Landmark District from the various proposals under consideration, including the CAMP. These approaches included substantial design modifications that reduced the contemporary art museum's height and mass. This alternative is no longer being evaluated because in 2009 the proponent abandoned its effort to build the contemporary art museum at the Main Post (King 2009). Following the proponent's decision, the Trust moved forward with the mitigated preferred alternative, which did not include the CAMP and which contemplated other changes in response to public comment and Section 106 consultation. The mitigated preferred alternative is analyzed as Alternative 2 in the final SEIS.



Source: Presidio Trust 2010

REFERENCES

Contemporary Art Museum at the Presidio (CAMP). 2007. *Response to Request for Proposals for Cultural Institutions at the Presidio Main Post*. Dated November 8.

Frankel, Diane, Management Consultants for the Arts. 2008. *Presidio Heritage Program: A Museum Without Walls.* Draft. Prepared for the Presidio Trust. Dated July 21.

King, John. 2009. *Fishers Give Up on Plan for Presidio Art Museum.* Article in San Francisco Chronicle. Dated July 2.

Presidio Historical Association. No date. *Proposal for a Cultural Institution at the Presidio Main Post, A History Center at the Golden Gate.*

Presidio Trust. 2002. *Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco.* Dated May.

_____. 2006. *Walt Disney Family Museum EA*. Dated August.

_____. 2007. *Main Parade EA.* Dated November.

_____. 2010. *Main Post Update*. Dated November.

Presidio Trust and National Park Service (NPS). 2004. *Levantar: The Presidio of San Francisco Archaeological Management Strategy.* Draft. Dated May.

San Francisco County Transportation Authority. 2008. *Final Environmental Impact Statement/Report and Final Section 4(f) Evaluation, South Access to the Golden Gate Bridge (Doyle Drive).* Dated September.

Affected Environment and Environmental Consequences

The following describes the environmental impacts of each alternative. Mitigation measures adapted from the final PTMP EIS and new measures where relevant are also discussed.

3.1 Land Use

AFFECTED ENVIRONMENT

Context

The Main Post, one of seven planning districts within Area B of the Presidio, is the oldest part of the Presidio. It dates from 1776 when early Spanish explorers chose the gently sloping land in front of what is now the Officers' Club as the site for a new presidio, or garrison, for their northern frontier. Since that time, the Main Post has undergone continuous expansion and redevelopment as the historic, social, and administrative center of the Presidio. Compared to other districts in the Presidio, the Main Post has undergone a great deal of development and change. Varied architectural styles and formal landscapes illustrate the complex layering of construction over time. Through all of the Presidio's major building campaigns, however, the Main Post has always been organized on a northeast/southwest grid framing central open spaces or parade grounds. This rectilinear organization has stood in contrast to the curving forms of the forested, steeply sloping southern hillsides, which provide a dramatic backdrop to the district. The open bluff along the district's northern edge offers spectacular views of San Francisco Bay and the land features beyond. Small remnants of the once ecologically rich Tennessee Hollow creek system and riparian corridor punctuate the eastern edge of the district.

Open Space

Today, of the 120 acres within the Main Post, approximately 92 acres, or 77 percent, are developed and 28 acres, or 23 percent, are open space. The district's open space consists of formal landscapes surrounding the clusters of buildings organized around three historic open spaces: the original El Presidio plaza, a Civil War-era parade ground (Old Parade), and the Main Parade built in the 1890s. Although all three ceremonial open spaces are still visible and still convey their orthogonal organization, their boundaries and visual character have been seriously compromised.[27] Other important designed landscape features within the district include Pershing Square, the Funston Avenue streetscape, the row of Montgomery Street Barracks, and the "Alameda" entrance (remnants

[27] *The proposed rehabilitation of the Main Parade, which would remove the existing seven-acre parking lot and replace it with landscaped open space, will better reinforce the edges of the parade ground through new design features including the Anza Esplanade.*

of the historic entry circle, garden and pathway at Presidio Boulevard / Funston Avenue).

Existing Building Uses

The district's 124 buildings (114 historic and 10 non-historic) include representatives from every era of the Presidio's history. The buildings are being re-used for offices, housing, and community support services. Existing building uses are shown in Figure 13. The breakdown by building square footage is as follows:[28]

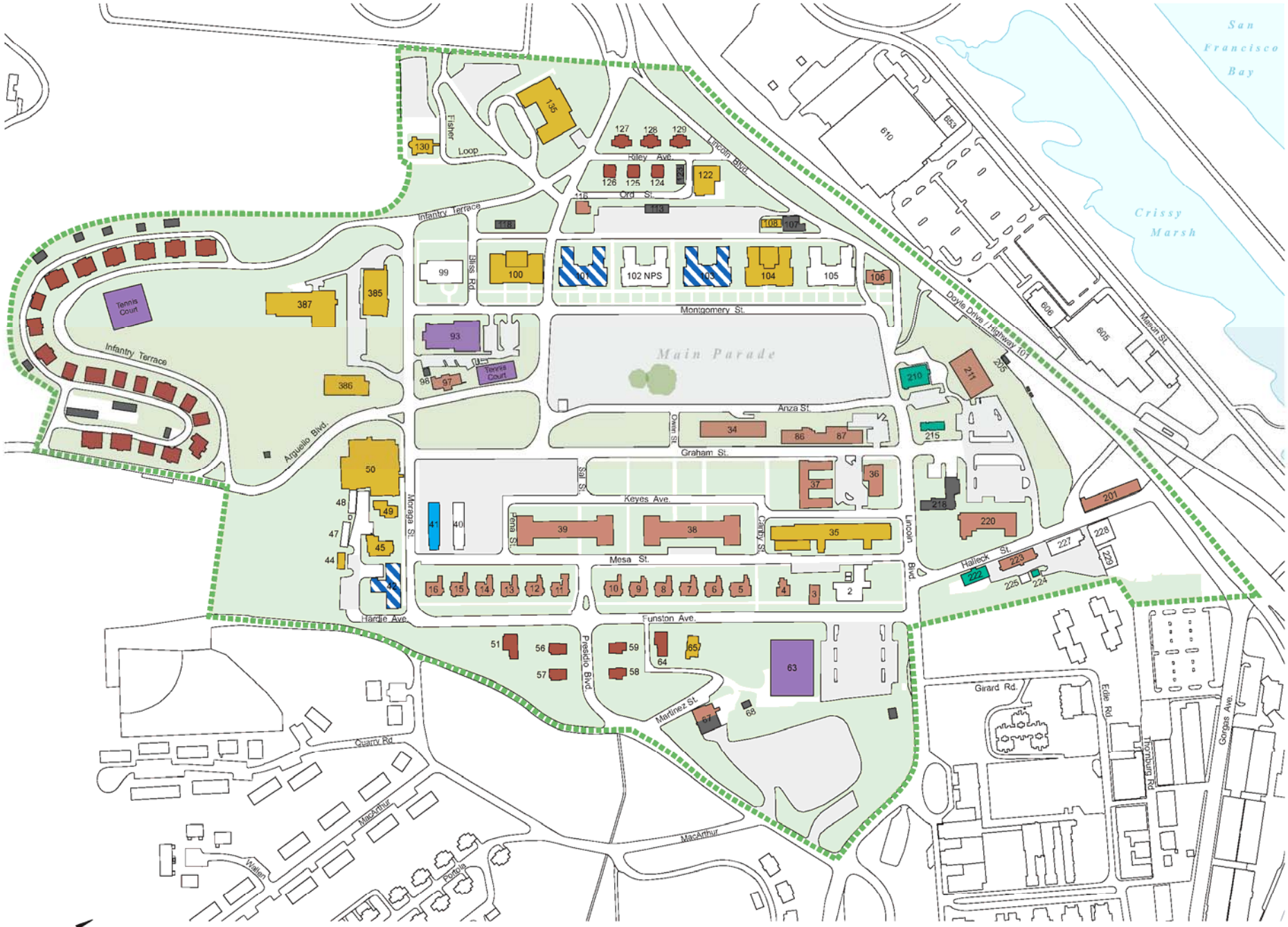
Use	*Square Feet*
Industrial/Warehouse/Infrastructure	51,000
Office	340,000
Retail/Community Support	8,000
Lodging/Conference	32,000
Recreational	36,000
Cultural/Educational	161,000
Residential	151,000
Vacant	369,000
TOTAL	**1,148,000**

Approximately 715,000 square feet, or 62 percent of the total of 1.148 million square feet of building space, have been recently rehabilitated and put to new uses to host park tenants and programs. Non-residential occupants include the First Republic Bank (Building 210); the Presidio Child Development Center (Building 387); the Bay School of San Francisco (Building 35), an independent high school; the San Francisco Film Society (Building 39); and various tenants within Buildings 11-16 (upper Funston Avenue Officers' Quarters). Existing administrative and operational functions include the Presidio fire station (Building 218), the post office (Building 210), Trust headquarters (Building 34), and the transit center (Building 215). Cultural/educational facilities at the Main Post include the Officers' Club (Building 50), the Presidio Chapel (Building 45), the Golden Gate Club (Building 135), the Presidio Interfaith Center (Building 130), the Walt Disney Family Museum (Buildings 104, 122, and 108), and the Herbst International Exhibition Hall (Building 385). Existing historic buildings that are currently being rehabilitated include the International Center to End Violence (Building 100) and Buildings 44 and 49. Various other buildings, including fthree of the Montgomery Street Barracks buildings (101, 103, and 105), are vacant or partially vacant, although Buildings 101 and 103 are being rehabilitated as "warm shells." Building 102, part of Area A and under the jurisdiction of the National Park Service (NPS), is also vacant. More information on tenants or uses that could be subject to closure due to one or more of the alternatives is provided below.

Presidio Bowling Center (Building 93) The 12-lane public Bowling Center features a pro shop, snack bar, grill, and bathrooms and houses 10 adult and youth leagues. The Bowling Center, one of two remaining in San Francisco,[29] is open 7 days per week. The Bowling Center receives

[28] *For the most part, building and land uses are self-explanatory. However, for the purposes of this analysis, the definitions on page 269 of the final PTMP EIS apply to the building use categories used here.*

[29] *The other facility is the Yerba Buena Ice Skating and Bowling Center at Yerba Buena Gardens on the rooftop of the Moscone Convention Center in downtown San Francisco.*


San Francisco Bay
Crissy Marsh
Main Parade
Tennis Court
Infantry Terrace
Arguello Blvd.
Fisher Loop
Bliss Rd.
Riley Ave.
Ord St.
Montgomery St.
Anza St.
Graham St.
Keyes Ave.
Mesa St.
Funston Ave.
Hardie Ave.
Moraga St.
Sanchez St.
Lincoln Blvd.
Presidio Blvd.
Martinez St.
Quarry Rd.
MacArthur
Wallen
Portola
Doyle Drive / Highway 101
Mason St.
Halleck St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
135
130
127
128
129
126
125
124
122
116
113
108
107
99
100
101
102 NPS
103
104
105
106
93
98
97
Tennis Court
387
385
386
50
48
49
47
45
44
42
41
40
39
38
37
36
34
86
87
35
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
51
56
57
59
58
64
65
63
67
68
210
211
215
216
220
201
222
223
227
228
229
225
224
610
603
606
605
0
400 FT
N
Source: Presidio Trust 2010
Main Post Planning District
Retail
Residential
Lodging
Cultural / Educational
Under / Pending Construction
Office
Recreation
Infrastructure
Vacant / Underutilized
Surface Parking

approximately 90,000 visits annually and employs 40 individuals (27 full-time and 13 part-time).

Herbst International Exhibition Hall (Building 385) The Herbst International Exhibition Hall (formerly the Post Exchange) was renovated in 1996 by the Fort Mason Foundation for the purpose of offering regional, national, and international exhibitions and special events. The exhibition hall can accommodate up to 600 people.

Presidio Trust Headquarters (Building 34) Building 34 houses most of the administrative functions of the Trust and is occupied by approximately 110 staff members. The Presidio Trust Library, a resource for the visiting public and Trust staff, is also located in the building.

Buildings 86/87 Five offices are located in Buildings 86 and 87, employing a total of 55 full-time and 2 part-time individuals. The for-profit businesses provide services in insurance and finances, asset management, design and motion graphics, and content management software. All tenants have short-term leases, with the last lease terminating in September 2011.

Surrounding Land Uses

The Main Post is located within the interior of the Presidio, which is bordered to the south and east by the City and County of San Francisco. The nearest San Francisco neighborhood to the Main Post is the Marina district, located approximately ½ mile east. In the vicinity of the Presidio, the Marina is a combination of single-family homes, duplexes, and triplexes. Residential mixed-use districts exist a few blocks farther east. The Marina district also includes neighborhood commercial land uses in the vicinity of the Presidio generally along Chestnut Street, Lombard Street, and Union Street.[30]

The restored Crissy Field (Area A), which is under the jurisdiction of the NPS, is located north of Mason Street between the Marina Green and Fort Point, is approximately 500 feet north of the Main Post. Crissy Field (Area A) has popular visitor sites such as the Promenade by the bay and natural features of the bayfront coastline, including 22 acres of dunes and the Crissy Field tidal marsh. Overlooking the tidal marsh in Area B is the Crissy Field Center (Building 603), which offers a variety of environmental education programs and amenities to the Bay Area population. A new adjunct to the Crissy Field Center was built near the Marina Gate, and the Center's programs have been temporarily moved to the new facility during reconstruction of Doyle Drive.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on land use, that is identifying proposed building and land uses at the Main Post and assessing the effects of new uses on the district and surrounding areas. To quantify the changes in building use, a building database was developed that identified the 2010 and proposed PTMP use and square footage of each structure in the district. For the purposes of this analysis, each building was assigned a treatment and use

[30] *Within the broader Marina district is an area more commonly known as Cow Hollow. This neighborhood south of Lombard Street is comprised primarily of residences.*

code (for example, demolition, or rehabilitation for current or new use) corresponding with each alternative, and the building use categories were totaled (as shown in Table 3). Building and land use maps were developed to represent the overall uses for Alternatives 2, 3, and 4 (as provided in Figures 4, 7, and 10, respectively) and were compared with Alternative 1 (Figure 1) or, in the case of Alternative 1, with existing uses (Figure 13) to determine the potential for incompatible uses. According to the final PTMP EIS, incompatibility would occur if a new use could conflict with adjacent building or land uses or compromise the nature and character of the Main Post or surrounding areas. Other impacts from proposed changes in land or building uses (such as adverse affects to historic properties or recreation, or increases in traffic, noise, or visitation) are discussed in other pertinent sections in the final SEIS.

Alternative 1

The impact of new uses within the Main Post on the Presidio and surrounding areas are analyzed on pages 274 through 276 of the final PTMP EIS. The Main Post would become a mixed-use district with a preference for and predominance of office, cultural/educational, and residential uses. The mix of cultural and educational programs and community and visitor-serving uses within the district would eventually result in the enhancement of the district as a primary focus for park visitors. New visitor-oriented programs would be provided by tenants in leased building space, and additional open space (such as the Main Parade) would be created. The district would experience a slight increase in density and square footage as a result of 110,000 square feet of new construction. Approximately half (50,000 square feet) of the new construction would be devoted to a new office building between the Old Parade and Main Parade, the key change in land use proposed under this alternative. Based on estimates prepared since the release of the final PTMP EIS in 2002, the existing square footage of 1.148 million square feet would increase by about 67,000 square feet to 1.215 million square feet (revised PTMP baseline of maximum square footage). The maximum square footage is less than the 1.240 million square feet anticipated in the PTMP due to the demolition of additional buildings required for the reconstruction of Doyle Drive. Beyond what was previously assumed in the final PTMP EIS, Doyle Drive reconstruction would require the full demolition of two additional buildings and partial demolition of a third (22,000 square feet total). Approximately 369,000 square feet of currently vacant buildings would be rehabilitated and reoccupied, including 43,000 square feet of lodging (Pershing Hall and Buildings 40 and 41). Approximately 460,000 square feet of other visitor-serving uses would be introduced, including a Heritage Center (Building 2), an Archaeology Center, the Presidio Theatre and addition, and the Presidio Chapel and addition. Consistency with PTMP planning principles and policies would ensure that no substantial conflicts with adjacent land uses would occur.

Office The change in land use on the proposed office development site (from open space to office) would be compatible with existing uses. Surrounding (primarily office) uses and activities in Buildings 34, 38, and 39 would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed new office building south of Building 34. Maximum height would be no more than 45 feet in accordance with the PTMP. The new structure would reinforce the historic framework and layout of the Main Post by reestablishing the historic relationship between buildings formerly

occupying the site and adjacent parade grounds. Consistency with PTMP planning policies and guidelines for buildings and structures would ensure compatibility with the character of adjacent buildings.

Presidio Theatre The 18,000-square-foot addition to and rehabilitation of the Presidio Theatre would allow the building to function in a manner consistent with its original use and location. The addition to the building would be designed to complement the existing structure and to serve the expanded program. Application of site-specific project parameters and ongoing design review would ensure that the addition respects the scale and character of surrounding buildings, and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Presidio Chapel The 4,000-square-foot addition to and rehabilitation of the Presidio Chapel would enhance the existing function of the historic building as an interfaith center and provide for its continued use. The expanded use would be consistent with activities (i.e., celebrations, meetings, conferences) at the nearby Golden Gate Club. Application of site-specific project parameters and ongoing design review would ensure that the addition respects the scale and character of surrounding buildings, and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Archaeology Center Relocation of the Presidio Archaeology Lab to Buildings 44, 47, 48, and 49 at the Main Post, along with a 500-square-foot addition between historic Buildings 47 and 48, would provide state-of-the-art lab and curation facilities and would allow the existing program to expand to provide more educational and volunteer opportunities. Application of site-specific project parameters would ensure that the addition respects the scale and character of surrounding buildings and is consistent with the varied size, structures, and mixed land use character of the Main Post district.

Alternative 2

Compared to Alternative 1, this alternative would provide for less office and residential space and allocate more space for cultural, educational, and other public-serving uses. Predominant land uses would remain as office and cultural/educational. Key changes in land or building uses would include the following:

- New construction along Graham Street identified in Alternative 1 for office space would be allotted to lodging, which would increase the amount of lodging by more than twice the square footage of that provided in Alternative 1.
- Office uses proposed for the upper floors of the Montgomery Street Barracks buildings would replace residential use, which would be reduced by about a third compared to Alternative 1.
- Cultural use at the site south of the Main Parade would displace an existing recreation use (Presidio Bowling Center in Building 93).
- Existing cultural use at the Building 385 site would be displaced by proposed surface parking.
- Additions to the Presidio Theatre and Presidio Chapel, and relocation of the Presidio Archaeology Lab would be the same as Alternative 1.

While the level of new construction would be greater than that in Alternative 1 by approximately 36,500 square feet, density and maximum building area (1.201 million square feet) in the district would

be less than under Alternative 1, due primarily to the demolition of Building 34 (Trust Headquarters) and Building 385 (Herbst International Exhibition Hall). There would be no substantial conflicts with adjacent land uses.

Lodge The change in building use on the proposed lodge development site (from office to lodging) would change the character of land use within this portion of the Main Post and increase current activity levels on the site. Surrounding (primarily office) uses and activities in Buildings 37, 38, and 39 would continue on their own sites and would interrelate with each other as they do at present, without disruption from the proposed Presidio Lodge. However, demolition of Building 34 and potential use of existing Buildings 86 and 87 for lodging would displace existing occupants of the buildings. Staff employed in Trust Headquarters would be relocated to one or more currently underused buildings within the district and/or elsewhere within the Presidio. Office tenants within Buildings 86 and 87 would have the option of moving to another location within the Presidio[31] or outside the park.[32]

New construction for the lodge would be limited to 70,000 square feet and would not exceed 30 feet in height. The scale and massing of the Presidio Lodge, therefore, would be similar to nearby Buildings 86 and 87. Furthermore, the materials, color, pattern and configuration of the infill construction would be compatible with the character of the adjacent buildings and consistent with site-specific project parameters established in the Main Post Update and ongoing design review. The new structure would reinforce the historic framework and layout of the Main Post by reestablishing separation between the Old Parade and Main Parade and by approximating the pattern of historic barracks that formerly occupied the site.

Montgomery Street Barracks Buildings Public-serving uses within the ground floors of Buildings 101, 103, and 105 would increase current activity levels along Montgomery Street. Along with the proposed Presidio Lodge, the increase in visitor services would also contribute to the mixed-use district and would enhance the Main Post as a destination for park visitors.

Site South of the Main Parade The change in uses would be compatible with existing nearby uses, including the proposed Heritage Center in Building 50, the Presidio Child Development Center in Building 387, and the proposed Presidio Theater in Building 99. Current activity levels on the site would not increase.

Parking at Building 385 Site Demolition of Herbst International Exhibition Hall for parking would reduce the available venues for indoor special events. Current users of the space could opt to hold their events or exhibitions at the Officers' Club, Fort Mason Center, or one of the other many venues readily available in the Bay Area.[33]

[31] *In March 2010, 42 leasing opportunities for non-residential tenants were available on the Trust's website.*

[32] *At year-end 2009, more that 86.4 million square feet of office space were available in San Francisco (TRI Commercial 2010).*

[33] *For example, Fort Mason Center hosts more than 15,000 events each year, produced by close to 2,000 different organizations and individuals, in a wide range of conference, meeting, and activity, theater, and pavilion-style spaces available for rent by both the nonprofit and for-profit sectors.*

Alternative 3

Similar to Alternative 1, predominant land uses would be office and cultural/educational. Conversion of Buildings 11-16 to bed and breakfast units would more than double the number of guest rooms in the district. Residential use would be reduced by about a third (to 167,000 square feet) as office use would replace housing in several of the Montgomery Street Barracks buildings. Building removal (approximately 64,000 square feet) and new construction (77,000 square feet) would result in a net decrease of total building square footage of 54,000 square feet to 1.161 million square feet, or 4 percent less than Alternative 1. While there would be no additions to the Presidio Theatre or Presidio Chapel under this alternative, cultural/educational building space would be maintained through development of the History Center, a key land use change under this alternative. There would be no substantial conflicts with adjacent land uses.

History Center The alternative would remove and replace existing recreational uses (the Presidio Bowling Center and adjacent tennis court) with a new cultural use (a History Center) and would increase the overall floor area on the site south of the Main Parade from 12,800 square feet to 48,000 square feet. The increase in square footage would change the general density and character of land use within this portion of the Main Post, and potentially increase activity on the site. The new use would require changes to the siting and design of new construction to protect the historic character of the district.

Alternative 4

Under this alternative, the general pattern of land use would be similar to current conditions, and, except for the rehabilitation of the Main Parade, there would be no land use changes of any consequence. Currently vacant building spaces would become occupied predominantly with office uses. Compared to Alternative 1, built space would decrease by approximately 6 percent due mainly to building removals required for the Doyle Drive project and the lack of new construction beyond projects permitted to date or built (i.e., Walt Disney Family Museum and International Center to End Violence). The total building area within the district would be about 1.14 million square feet. Consistency with the PTMP planning principles and policies would ensure that no substantial conflicts with adjacent land uses would occur.

MITIGATION MEASURES

The following measure from the final PTMP EIS would apply to all alternatives to minimize possible land use conflicts.

CO-1 *Monitoring of Area B Uses* Through the course of implementation, including leasing activities, the Trust would review proposed uses for buildings for their consistency with the PTMP Planning Principles to ensure protection of the Presidio's cultural, natural, scenic, and recreational resources. The Trust would also consult with the NPS for all activities that would have the potential to significantly affect Area A resources.

REFERENCES

TRI Commercial. 2010. *Year-End 2009 San Francisco Trends.* San Francisco, CA.

3.2 Land Use Plans and Policies

The NEPA requires an EIS to discuss possible conflicts among alternatives and the objectives of land use plans, policies, and controls for the area concerned. The site is located on the Main Post in Area B of the Presidio, which is under exclusive jurisdiction of the Presidio Trust, a federal agency. The Trust's formally adopted statement of land use policy is the Presidio Trust Management Plan (PTMP or plan).

CONSISTENCY WITH THE PRESIDIO TRUST MANAGEMENT PLAN

The PTMP provides an interrelated set of planning principles and policies, which taken together provide the framework for the Trust's decision-making and actions. The PTMP makes clear that "should principles come into conflict, care will be taken to balance competing values, and to seek overall conformance to the policy framework established by this [p]lan" (page 2). Furthermore, the PTMP is intended to be programmatic, rather than prescriptive, to allow consideration of alternative or changed uses, when appropriate.

The consideration of the PTMP planning principles and policies is carried out as an integral part of the Trust's weighing of environmental and non-environmental factors in reaching a rational and balanced decision. The discussion of land use policy conflicts will be relied upon in the Record of Decision and used by the Trust's Board of Directors as part of their decision whether to approve or disapprove the mitigated preferred alternative. Under the NEPA, however, the Trust has the authority to move forward with the mitigated preferred alternative, despite any possible conflict. Any potential conflicts with the PTMP that relate to physical environmental issues (such as increasing traffic or noise) are evaluated as part of the impacts analyses in various sections of the final SEIS. Any potential conflicts with PTMP policies not identified in the final SEIS could be considered in the design and construction review process and would not alter the physical environmental impacts of the mitigated preferred alternative analyzed in the final SEIS.

The existing building space in the Main Post is 1.15 million square feet and maximum future space allowed by the PTMP is 1.240 million square feet. The PTMP thus allowed for a net increase of 90,000 square feet that took into account 20,000 square feet of allowable demolition and 110,000 square feet of new construction.

Alternative 1

Alternative 1 reflects the Final Plan Alternative analyzed in the final PTMP EIS and therefore is consistent with the planning concept and planning guidelines described in the PTMP for the Main Post. The proposed maximum building area of 1.215 million square feet would be less than the planned 1.240 million square feet in the PTMP due to the demolition of additional buildings required for the replacement of Doyle Drive. The additional building demolition, which was not considered in the PTMP, is an unforeseen factor that altered assumed conditions after the PTMP was adopted, which in turn have been taken into account in this alternative. All projects with new construction (office, Presidio

Theatre, Presidio Chapel, Archaeology Center) proposed in this alternative would be considered preferred uses for the Main Post district under the PTMP. In general, these projects would be compatible with the character-defining features of the district as described in the PTMP, and with its guidelines for future changes, including potential new construction. The 110,000 square feet of new construction would be implemented as assumed in the PTMP.

Office (South of Building 34 Site) New construction for office use on the site south of Building 34 poses no conflict with PTMP policies. The PTMP identifies the Main Post as an appropriate location for office space. The project would be consistent with PTMP objectives for new construction, which permit freestanding buildings in order to enhance the function of adjacent landscapes and to reinforce historic character-defining features. The design and location of construction would be in keeping with PTMP historic preservation objectives to protect the character and integrity of the historic setting.

Presidio Theatre and Presidio Chapel Reuse and rehabilitation of the Presidio Theatre and Presidio Chapel pose no conflicts with the Trust's policies presented in the PTMP. The building additions would be consistent with PTMP objectives for new construction, which allow compatible additions to enhance the function of the adjacent historic buildings.

Heritage Center (Building 2) and Archaeology Center Rehabilitation and reuse of Building 2 as a Heritage Center pose no conflicts with the Trust's policies presented in the PTMP. Both the proposed Heritage Center in Building 2 and Archaeology Center would achieve PTMP objectives by contributing to the preservation of the park and its resources by deepening the public's understanding of the park's history, and by adapting historic buildings for these public uses.

Lodging Lodging in the Main Post poses no conflicts with PTMP policies. Pershing Hall is identified as one of the "priority sites" for lodging within the PTMP. Historic Building 41 has also provided affordable short-term accommodations in recent years. Lodging within the buildings would advance the PTMP objectives to provide visitors the opportunity to stay overnight in an historic building, and give them a first-hand experience of elements of former Presidio military life.

Alternative 2

Under Alternative 2, the proposed maximum building area of 1.201 million square feet would be less than the maximum permitted 1.215 million square feet (as revised by the Doyle Drive project) under the PTMP. However, Alternative 2 would require amending the PTMP[34] to reflect the proposed increase in both building demolition and new construction. Under Alternative 2, 94,000 square feet of buildings would be demolished, which is 50,000 square feet more than would be demolished under Alternative 1. Alternative 2 would remove or relocate Buildings 40 and 41 for El Presidio, Building 34 for the Presidio Lodge, and Building 385 for additional parking. New construction would exceed the amount allotted in the PTMP by 37,000 square feet. New construction under Alternative 2 would include 70,000 square feet for the Presidio Lodge and 30,000 square feet for incidental construction.

[34] *The decision amending the PTMP would be adopted by resolution of the Presidio Trust Board of Directors.*

Construction would occur in developed areas and would be compatible with existing structures.[35] The additional square footage would not affect the overall park-wide cap of 5.96 million square feet, nor would it affect the commitment made by the Trust in the PTMP to reduce the amount of square footage in the park to 5.6 million square feet. Also consistent with the PTMP, the Trust has developed through this NEPA process compelling reasons for allowing building removal or new construction: to consolidate built space in the northern end of the Presidio, to bring more cultural and public uses to the Main Post, to activate and organize its open spaces, and to stimulate reuse of the existing historic buildings. The Trust is satisfying its commitment made in the PTMP to engage in public review before making any decision to proceed with specific proposals to remove historic buildings or to construct new buildings.

Lodging The PTMP proposed that lodging be accommodated in historic buildings. This alternative would use historic buildings to support lodging (i.e., Pershing Hall), but would also use 70,000 square feet of new construction for a freestanding lodge, which is inconsistent with the PTMP. In that regard, the Presidio Lodge would also be inconsistent with the PTMP's commitment to locate public uses mainly in existing structures.

El Presidio Proposals for El Presidio under Alternative 2 do not pose any conflicts with PTMP policies. Should Buildings 40 and 41 eventually be removed following additional Section 106 consultation, the PTMP would allow for their demolition. The PTMP allows for the demolition of buildings to achieve other plan objectives, such as to restore open space and an important cultural landscape, which would be the case under Alternative 2.

Site South of the Main Parade Reuse of the Presidio Bowling Center (Building 93) to support park programs would be inconsistent with the PTMP's commitment to retain facilities for active recreational use. However, the PTMP acknowledges that recreational facilities may be removed in conjunction with planned projects such as rehabilitation of the Bowling Center.

Heritage Center (Building 50) Rehabilitation and reuse of Building 50 as a Heritage Center pose no conflicts with PTMP policies. The proposed Heritage Center would achieve PTMP objectives by contributing to the preservation of the park and its resources by deepening the public's understanding of the park's history, and by adapting historic buildings for this public use.

Theatre, Chapel, and Archaeology Center See discussion of Alternative 1 above.

Alternative 3

Alternative 3 would amend the PTMP to reflect the proposed increase in building demolition above that identified in the PTMP. The 64,000 square feet of buildings that would be demolished would be 20,000 square feet greater than under Alternative 1, due primarily to demolition of Buildings 40 and 41 for El Presidio and Building 93 for the History Center. The 77,000 square feet of new construction would be 33,000 square feet less than that assumed under Alternative 1. However, 48,000

[35] *For more discussion of this issue, refer to the response to comment titled "Compliance with the Presidio Trust Act" in Section 4.2, Art Museum EIS Scoping Process and Issues Raised During Scoping in the draft SEIS.*

square feet of new construction, in the form of the History Center at the site south of the Main Parade, would conflict with PTMP objectives that strive to protect the character of the historic setting. Given the increase in demolition and decrease in new construction, the proposed maximum building area of 1.161 million square feet would be less than the 1.215 million square feet (as revised by the Doyle Drive project) envisioned in the PTMP.

History Center Construction of the History Center at the site south of the Main Parade would not be consistent with PTMP objectives that new construction on the Main Post reinforce historic patterns of spatial organization and complement the rehabilitation of adjacent historic buildings. The new construction would also be inconsistent with the PTMP commitment to locate public uses mainly in existing structures. Demolition of the Bowling Center and adjacent tennis court as required for the History Center would be inconsistent with the PTMP's commitment to retain facilities for active recreational use.

Lodging Lodging as proposed under Alternative 3 poses no conflicts with PTMP policies, which identify Pershing Hall as a preferred location for lodging. The PTMP also considers the upper Funston Avenue Officers' Quarters (Buildings 11-16) for bed-and-breakfast accommodations as a priority site and the "best use" for these historic buildings.

El Presidio See discussion of Alternative 2 above.

Alternative 4

Alternative 4 would only minimally advance the PTMP goal to bring people to the park, as the limited visitor-serving uses and other amenities would not make the park a welcoming place for visitors. Should buildings not be filled and infrastructure systems not be improved, this alternative also would not attain the PTMP goal to preserve and enhance park resources, nor support the plan's requirement to provide for the Presidio's long-term management and care.

CONSISTENCY WITH THE SAN FRANCISCO GENERAL PLAN

The Presidio is a federal enclave within the City and County of San Francisco, and local land use plans, policies, and regulations do not apply. Nevertheless, the San Francisco General Plan, specifically the policy of the Recreation and Open Space Element that calls for preservation of the Presidio and its resources, and its associated guidelines, is discussed below.

The San Francisco General Plan (Map 3) designates the Presidio as "P" for Public Use and identifies Area B as "Open Space Area" and "Developed Area". Specifically relative to the Presidio, Policy 2.5 of the Recreation and Open Space Element recognizes the Presidio as among the most important and historic open spaces in the city, and a National Historic Landmark. The policy calls for the preservation of the open space and natural, historic, scenic, and recreational features of the Presidio, and acknowledges that large portions of the Presidio, including the Main Parade, have been developed as surface parking lots used mainly by commuters working in the park. The policy embraces the city's "transit-first policy"[36] by urging a transportation management

[36] *San Francisco City Charter, Section 8A.115. Any new demands for public transit generated by proposals within the Main Post district and transportation investments to meet those demands would be addressed by the city along with its other obligations. The Trust would continue*

(continued next page)

program to expand use of transit, carpools, and vanpools, and to reduce the amount of needed parking. The policy also encourages conversion of needed parking into parking structures whenever possible. The policy then recommends various guidelines to apply to new development and land use changes. The relationship of the Trust's action alternatives to these guidelines is described below.

New Structures

Guidelines and procedures in the PTMP and Main Post Update would ensure that any new construction under the alternatives is located and sized appropriately as called for in the Policy 2.5 Guideline 1, which states that "no new structures should be built that would adversely affect the scenic beauty and natural character of the Presidio."

New Construction

Policy 2.5 Guideline 3 recognizes removal and/or replacement of some structures within the Presidio as a management option. Policy 2.5 Guideline 4 echoes the Trust Act's provision to limit new construction to existing areas of development.

Historic Structures

Guidelines in the PTMP and Main Post Update would ensure that the size, scale, location, and design of new construction would be compatible with the Presidio's historic setting and the character of the area. These guidelines and preservation, rehabilitation, and use of historic buildings and landscapes in accordance with The Secretary of Interior's Standards for the Treatment of Historic Properties and the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco would promote Policy 2.5 Guideline 6, which suggests that "historic structures and sites should be preserved."

Hiking and Bicycle Trails

Implementation of new trail corridors, such as the Presidio Promenade, and bicycle routes within the Main Post consistent with the Presidio Trails and Bikeways Master Plan would be responsive to Policy 2.5 Guideline 8, which recommends improvements to the recreational trail system. ("The system should include well designed and marked hiking and bicycle trails through the Presidio. Points of historic interest should be marked.")

to: 1) expand its transportation demand management program, including alternative transportation, to meet public transportation needs; and 2) coordinate with the city to minimize adverse impacts on transit services provided by the city.

REFERENCES

City and County of San Francisco. 1986. *San Francisco General Plan Recreation and Open Space Element.* Prepared by the San Francisco Planning Department.

Presidio Trust. 2002. *Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco.* Dated May.

3.3 Transportation and Parking

AFFECTED ENVIRONMENT

This analysis is based in part on the Background Transportation Report for the Presidio Trust Management Plan (Wilbur Smith Associates 2002). The information obtained from the report was supplemented and updated with new traffic, transit, and parking data collected specifically for this SEIS. The following components of the transportation system are addressed in this section:

- Roadway network
- Traffic characteristics
- Public transit services
- Pedestrian and bicycle facilities
- Parking conditions

Roadway Network

Throughout its history, the Main Post has been a destination. From the earliest days of the Spanish garrison, roads from Mission Dolores, Yerba Buena (today, downtown San Francisco), and the Castillo (the Royal Spanish fort that guarded the Golden Gate strait) came together at the Main Post. These roads laid the foundation for today's primary streets. As the Main Post expanded, a rectilinear pattern of streets grew outward from El Presidio plaza, establishing a hierarchy of entries. Key entries include the former Alameda, the Halleck Street service corridor to the north, the southern arrival at Arguello Boulevard, the Lincoln Boulevard/Montgomery Street guardhouse checkpoint, and Sheridan Avenue to the west.

The Main Post continues to serve as a hub for Presidio tenants, residents, and visitors. Circulation within the Main Post is fairly confusing, however, in part because the hierarchy of Main Post streets has become unclear. Roadways connect the Main Post to the Marina and Cow Hollow neighborhoods to the east and Richmond and Presidio Heights neighborhoods to the south. All of the intersections within the Presidio as well as those at its gates are unsignalized.

The key roadways serving the Main Post are described below.

Lincoln Boulevard Lincoln Boulevard runs generally east-west in the eastern portion of the Presidio and serves as the primary thoroughfare in the Presidio. It begins at the intersection of Presidio Boulevard/Letterman Drive and ends at the intersection of 25th Avenue/El Camino del Mar. Lincoln Boulevard includes one lane in each direction with left-turn pockets at key intersections.

Presidio Boulevard Presidio Boulevard has one lane in each direction. It begins at Funston Avenue in the Main Post, connects to Lincoln Boulevard/Letterman Drive near the Letterman Digital Arts Center, and continues north-south in the eastern portion of the park to the southern boundary of the park, where it becomes Presidio Avenue in San Francisco.

Arguello Boulevard Arguello Boulevard has one lane in each direction. It runs north-south from its intersection with Sheridan Avenue in the Main Post, extending south through the Presidio's southern boundary. It serves as a gateway to the Richmond district of San Francisco.

Lombard Street Lombard Street runs east-west from its intersection with Presidio Boulevard near the Letterman Digital Arts Center and extends into San Francisco to the east. Lombard Street has one lane each way. It serves as the primary gateway to the eastern portion of the Presidio.

U.S. Highway 101 U.S. Highway 101 near the Presidio is comprised of the southern Golden Gate Bridge approach, Doyle Drive, Richardson Avenue, and Lombard Street (from Richardson Avenue to the east). Doyle Drive runs generally east-west through the northern portion of the Presidio before becoming Richardson Avenue. Richardson Avenue generally has three lanes in each direction and runs diagonally (northwest–southeast) from Doyle Drive until it merges with Lombard Street about two blocks east of the Presidio's eastern boundary. U.S. Highway 101 carries the majority of the east-west traffic between the Golden Gate Bridge and areas outside the Presidio. The only access to/from Doyle Drive in the Presidio is at the Golden Gate Bridge viewing area, the left exit slip ramp from northbound Richardson Avenue to the Letterman district, and a signalized intersection with Gorgas Avenue near the eastern boundary of the park.

Traffic Characteristics

Gateway Traffic Peak hour weekday traffic volumes collected in November and December 2000 for the purposes of the final PTMP EIS indicate a total of 5,967 vehicles were observed at the Presidio's gateways during the weekday PM peak hour, with the greatest percentage of traffic (21 percent) traveling through the Lombard Gate. Table 4 summarizes how the PM peak hour gateway volumes have changed in recent years. Despite several new tenants in the Presidio between 2000 and 2005, the total PM peak hour gateway counts in October 2005 were only slightly higher than those collected in 2000. Slip ramp access from Richardson Avenue was completed and opened during this time, and consequently traffic through the Lombard Gate decreased. Traffic entering the Presidio via the slip ramp and exiting onto Richardson Avenue is included in the counts for the Gorgas Gate. PM peak hour gateway counts in January 2008 were about 12 percent lower than counts collected in October 2005, with the decrease being most pronounced at the 25th Avenue and Golden Gate Bridge Toll Plaza Gates. Much of this difference is likely due to seasonal variation. Gate counts were collected again in March 2009. The gate counts indicate that peak hour volumes through the park's gates have continued to increase with increased occupancy of Presidio buildings and volume of pass-through traffic.

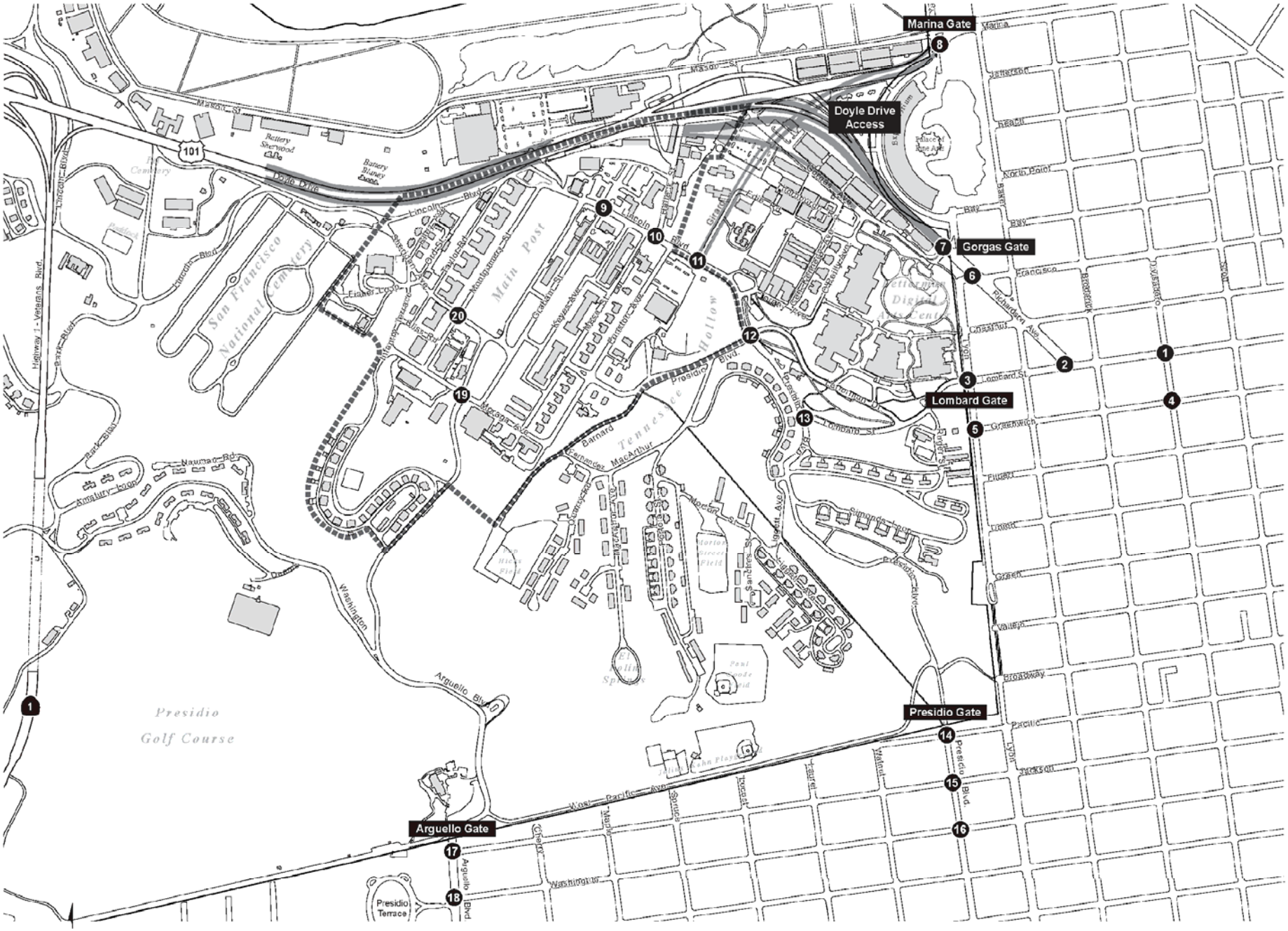
Intersection Analysis A total of 20 intersections, shown in Figure 14, were identified as study intersections for the analysis. These intersections are located on key access routes to the Main Post, both inside and outside the park. The intersections are primarily a subset of intersections analyzed as part of the final PTMP EIS, although three intersections on Greenwich Street and Divisadero Street were added in response to scoping comments from neighborhood groups near the Lombard Gate. The study

4 PRESIDIO GATEWAYS TRAFFIC VOLUME SUMMARY (WEEKDAY PM PEAK HOUR VOLUMES)

Gate	November / December 2000		October 2005		January 2008		March 2009	
	Vehicles per Hour	Percent of Total	Vehicles per Hour	Percent of Total	Vehicles per Hour	Percent of Total	Vehicles per Hour	Percent of Total
Marina	456	8	539	9	496	9	654	10
Gorgas[1]	196	3	363	6	315	6	660	10
Lombard	1,260	21	1,101	18	1,068	20	1,141	17
Presidio	1,002	17	982	16	1,005	19	906	14
Arguello	815	14	774	13	728	14	852	13
15th Avenue	107	2	134	2	143	3	125	2
25th Avenue	1,072	18	958	16	740	14	1,005	15
Plaza West	325	5	471	8	308	6	436	7
Plaza East	734	12	691	12	465	9	750	11
TOTAL	**5,967**	**100**	**6,013**	**100**	**5,268**	**100**	**6,529**	**100**

Source: Presidio Trust 2010

[1] *The Gorgas Gate includes the slip ramp in the October 2005, January 2008, and March 2009 counts.*



Source: Presidio Trust 2010

intersections are those that would most likely be substantially affected by increased traffic traveling to and from the Main Post. The study intersections are:

1 Lombard/Richardson
2 Lombard/Divisadero
3 Lombard/Lyon
4 Greenwich/Divisadero
5 Greenwich/Lyon
6 Richardson/Francisco
7 Richardson/Gorgas
8 Doyle/Marina/Mason
9 Lincoln/Graham
10 Lincoln/Halleck
11 Lincoln/Girard
12 Lincoln/Letterman/Presidio
13 Lombard/Presidio
14 Presidio/Pacific
15 Presidio/Jackson
16 Presidio/Washington
17 Arguello/Jackson
18 Arguello/Washington (outside the Presidio)
19 Arguello/Moraga
20 Sheridan/Montgomery

The turning movement traffic volumes at the study intersections were counted during the morning and afternoon peak-commute periods (7:00 to 9:00 AM and 4:00 to 6:00 PM) in January 2008. The peak hour total intersection traffic volume during each two-hour period was determined for each intersection and used for the intersection capacity analysis. In order to account for the seasonal variation in traffic volumes, the 2008 intersection turning movement counts were adjusted upward by 11 percent. The 11-percent adjustment is derived from PM peak hour gateway counts for three different seasons in 1998.

The AM and PM peak hour intersection operations analysis was conducted according to the methodology described in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board 2000). The HCM methodology is currently the most commonly accepted methodology for traffic analyses and is the methodology currently used by the City and County of San Francisco for assessing traffic impacts. The HCM methodology calculates the average delay experienced by a vehicle traveling through the intersection and assigns a corresponding level of service (LOS). The levels of service range from LOS A, indicating volumes well below capacity with vehicles experiencing little or no delay, to LOS F, indicating volumes near capacity with vehicles experiencing extremely high delays. An intersection operating at LOS D or better is generally considered to be operating acceptably. Levels of service E and F are generally considered unacceptable. At one-way or two-way stop-controlled intersections, however, delay and LOS are calculated for each stop-controlled approach and operating conditions are reported for the worst approach. Levels of service for signalized intersections and all-way stop-controlled intersections are based on the weighted average delay per vehicle for all vehicles approaching the intersection. The HCM level of service criteria for signalized and unsignalized intersections are provided in Appendix A.

Table 5 presents the existing delay per vehicle and LOS for the 20 study intersections for both the AM peak hour and PM peak hour. Most of the intersections within the Presidio operate acceptably (LOS D or better) during both the AM and PM peak hours. Three intersections currently operate at LOS E or F in the AM peak hour and one intersection operates at LOS E or F in the PM peak hour. The intersection of Lyon/Lombard operates at LOS F and E in the AM and PM peak hour, respectively. In 1996, approximately 50 percent of the traffic traveling through the Lombard Gate at this intersection was determined to be merely passing through the Presidio, not traveling to or from uses in the park. Approximately 40 percent of the traffic through the Presidio Gate was estimated to be pass-through traffic, and this affects the operation of intersections on Presidio Boulevard. The intersection of Lombard/Presidio currently operates at LOS E in the AM peak hour, and the heavy volume of pass-through traffic on the northbound approach contributes to poor operating conditions at this intersection. Similarly, the intersection of Presidio/Jackson currently operates at LOS E in the AM peak hour. Detailed AM and PM peak hour LOS calculations for existing conditions at all study intersections are provided in Appendix A. Compared to intersection operating conditions in the year 2000, of the 17 intersections analyzed for the purposes of the final PTMP EIS, many have either remained at the same level of service or degraded one level (e.g., from LOS B to LOS C). Only three intersections on Presidio (Jackson, Pacific, and Letterman/Lincoln) deteriorated more than one level of service, all in the AM peak hour.

Public Transit Services

Public transit systems serving the Presidio include Muni, Golden Gate Transit, and the PresidiGo shuttle service. These services provide access to other regional carriers such as BART, AC Transit, CalTrain, SamTrans, and the regional ferry system. In addition, there are private transit carriers that accommodate specific needs not served by the public systems.

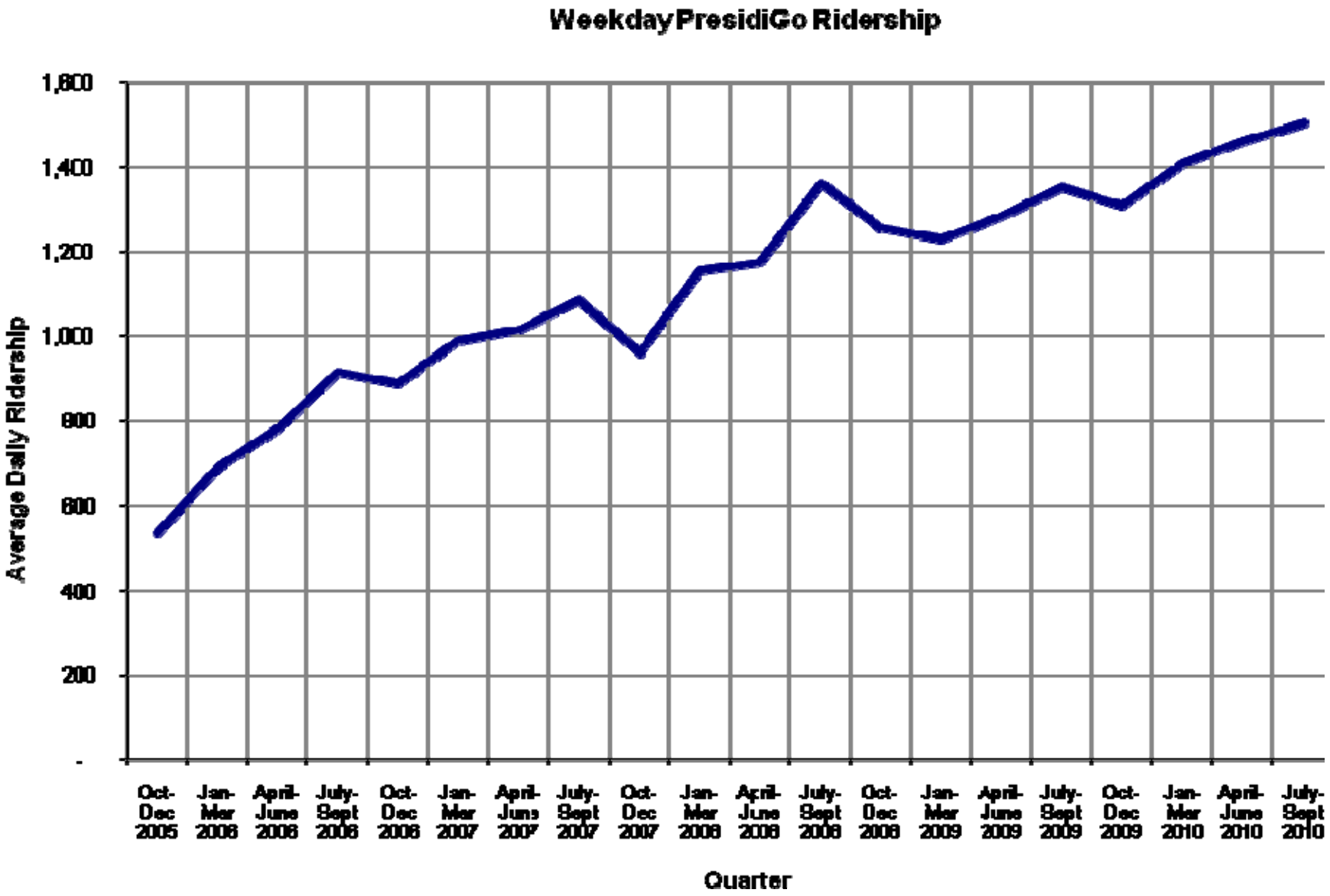
PresidiGo Shuttle (Downtown and Around the Park) The Trust implemented downtown shuttle bus service (PresidiGo Downtown) for Presidio employees and residents in September 2005. Since the inception of this service, ridership has grown dramatically, as illustrated in the chart below.

The PresidiGo downtown service is sequenced with the internal shuttle route (PresidiGo Around the Park) and allows Presidio residents to travel downtown without transferring to another bus. Presidio employees can board the Downtown shuttle service at the Transbay Terminal or the Embarcadero BART Station. PresidiGo downtown shuttle service is provided on weekdays from 5:45 AM to 9:00 PM. Downtown service operates at a frequency of every 15 minutes during the two-hour morning and afternoon peak periods, every 30 minutes on the shoulder periods, and every hour midday.

5 EXISTING (YEAR 2008) INTERSECTION OPERATING CONDITIONS (AM AND PM PEAK HOUR)

	Intersection	*Control Device*	*AM Peak Hour*		*PM Peak Hour*	
			LOS	*Delay (sec/veh)*	*LOS*	*Delay (sec/veh)*
1	Lombard/Richardson	Signal	A	7.0	A	4.5
2	Lombard/Divisadero	Signal	B	12.4	B	12.0
3	Lombard/Lyon	AWSC	**F**	**68.4**	**E**	**38.0**
4	Greenwich/Divisadero	AWSC	B	12.8	B	13.0
5	Greenwich/Lyon	AWSC	A	8.3	A	8.3
6	Richardson/Francisco	Signal	B	11.7	B	11.5
7	Richardson/Gorgas	Signal	A	6.7	A	7.2
8	Doyle/Marina/Mason	Signal	C	26.5	B	11.0
9	Lincoln/Graham[1]	AWSC	B	10.7	B	10.5
10	Lincoln/Halleck[1]	TWSC	C	22.2	C	19.9
11	Lincoln/Girard[1]	TWSC	B	14.6	B	14.3
12	Lincoln/Letterman/Presidio[1]	AWSC	C	18.4	B	12.7
13	Lombard/Presidio[1]	AWSC	**E**	**42.9**	C	24.7
14	Presidio/Pacific	AWSC	D	28.5	C	23.4
15	Presidio/Jackson	AWSC	**E**	**37.1**	D	29.6
16	Presidio/Washington	AWSC	C	22.9	C	21.5
17	Arguello/Jackson	AWSC	C	15.4	B	14.0
18	Arguello/Washington	AWSC	C	22.6	C	18.6
19	Arguello/Moraga[1]	AWSC	B	10.4	B	10.1
20	Sheridan/Montgomery[1]	AWSC	B	14.3	A	8.2

Source: Presidio Trust 2010
[1] Intersection is in the Presidio.
Notes: AWSC = all-way stop control
TWSC = two-way stop control
LOS = level of service
sec/veh = seconds per vehicle
For signalized and AWSC intersections, the LOS and average delay per vehicle are presented for the overall intersection.
For TWSC intersections, average delay per vehicle and LOS are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*



Source: Presidio Trust 2010

As ridership on PresidiGo downtown service has grown, capacity continues to be added in order to keep pace with demand. Capacity has been increased by adding runs, extending service hours, and using larger vehicles. In February 2006, three additional morning runs and two additional afternoon runs were added. In May 2007, hourly service was added during the middle of the day. As they reach the end of their useful life, the original 24-passenger buses are being replaced with larger 37-passenger buses, significantly increasing capacity on the popular PresidiGo downtown service. The first 37-passenger bus was put into service in December 2007, with three more buses replaced in 2008 and 2009. In 2010, the remaining three smaller buses were replaced with larger ones.

PresidiGo Around the Park serves the entire Presidio. The internal shuttle routes connect residential areas, commercial areas, and visitor destinations in the park, as well as key transfer points to Muni and Golden Gate Transit buses. PresidiGo Around the Park shuttle service operates at a frequency of every 30 minutes on weekdays between 6:30 AM and 8:00 PM and every hour on weekends between 11:00 AM and 6:45 PM.

Muni Muni provides regular scheduled daily transit service to the nearby Letterman district on the 43-Masonic route and service to within one block of the Lombard Gate on two other routes (41-Union and 45-Union/Stockton). Table 6 presents the Muni bus lines serving the Main Post or adjacent neighborhoods, including route descriptions and the weekday AM and PM peak period headways as of January 2010. The 43-Masonic route extends between the Presidio and Lombard Gates with stops at the Letterman and East Housing areas. Lines 41-Union and 45-Union/Stockton provide service to the corner of Greenwich and Lyon streets just outside the Lombard Gate.

Recent Muni ridership data on the number of passengers boarding or disembarking from a bus within the Presidio indicate that majority in the Presidio are on the 43-Masonic route. Current weekday daily Presidio-based ridership on the 43-Masonic route is 322, with about 10 percent riding in the AM peak period and nearly one-third riding in the PM peak-commute period.

As shown in Table 6, recent Muni monitoring data at each line's maximum load point, defined as the location along the route at which the highest level of ridership typically occurs, indicate that the Muni lines serving the Presidio area are well-used at their respective maximum load points. Because the Presidio is at or near the end of all these routes, however, there is substantial excess capacity in and near the Presidio.

Pedestrian and Bicycle Facilities

The Main Post currently has a network of sidewalks, trails, and bicycle routes. Most intersections within the Main Post have marked pedestrian crosswalks. Sidewalks and/or multi-use paths provide pedestrians a safe connection between the Main Post and the Lombard Gate, where there are connections to the Muni 41-Union and 45-Union/Stockton routes, and to the Letterman district, where there is a connection to the Muni 43-Masonic route.

6 NEARBY MUNI TRANSIT LINES

Muni Route	*Description*	*AM/PM Peak Period Schedule Headway*	*Load Factor During Peak Periods*
41-Union	Weekday peak periods only, connecting Greenwich/ Lyon with downtown San Francisco.	10/9 minutes	79.3%
43-Masonic	Daily route connecting the Marina district to the Excelsior district via Lombard, Presidio, and Masonic.	9/10 minutes	94.0%
45-Union/Stockton	Daily local route connecting Greenwich/Lyon with Caltrain Depot at 4th/Townsend.	9/9 minutes	93.7%

Source: San Francisco Municipal Transportation Agency 2008

There are several bicycle routes serving the Main Post, although bicycles and vehicles share a standard-width roadway along most of these routes. Lombard Street, Presidio Boulevard, Mason Street, and Arguello Boulevard are part of the designated San Francisco Citywide Bicycle Route System (Routes #4, #55, #2, and #65, respectively) that continue into the Presidio to serve the Main Post or nearby areas. Most of these routes are Class III facilities (signed route only – bicyclists share roadway with motor vehicles), although Mason Street has Class I (separate off-street path) and Class II (dedicated, striped bike lanes on roadway edge) facilities, and Lincoln Boulevard between the Letterman district and Main Post district has striped bike lanes. Construction of a multi-use path between the cemetery and the Golden Gate Bridge toll plaza was completed in 2008. The path will be connected to the Main Post after construction of Doyle Drive. This multi-use path will substantially improve the bicycle and pedestrian connection between the Main Post and the Golden Gate Bridge.

Other improvements to the pedestrian and bicycle circulation network throughout the Presidio will be completed in coming years as described in the Presidio Trails and Bikeways Master Plan (NPS and Trust 2003).

Parking Conditions

Parking occupancy information in the Main Post district (excluding Infantry Terrace) was collected in the summer of 2006, twice in the summer of 2007, during the summer of 2008, and in the summer of 2009 during the weekday midday peak period (between 10:00 AM and 2:00 PM). Table 7 provides a summary of these recently collected data. The latest survey indicates that 969 spaces (44 percent) of the 2,200 spaces were occupied during the most recent midday period, when approximately 61 percent of the building square footage in the district was occupied.

7 PARKING SUPPLY AND CURRENT USE WITHIN THE MAIN POST

Date	*Total Spaces*	*Spaces Occupied*	*Percent Occupied*
August 1, 2006	2,200	838	38
July 17, 2007	2,200	1,050	48
August 8, 2007	2,200	1,075	49
July 24, 2008	2,200	1,034	47
July 7, 2009	2,200	969	44

Source: Presidio Trust 2010

ENVIRONMENTAL CONSEQUENCES

Methodology

Estimates of weekday daily, AM, and PM peak hour trips generated by each of the alternatives are based on the methodology used in the cumulative analysis for the final PTMP EIS, which, in turn, was based on trip generation information from standard data sources such as the San Francisco Planning Department Guidelines for Environmental Review (SF Guidelines), the State of California Department of Transportation (Caltrans), and the Institute of Transportation Engineers (ITE).

For the purposes of this analysis of transportation conditions in the Main Post, travel demand assumptions for specific, more defined uses (e.g., museums, theatre, YMCA Fitness Center, or recently approved projects) have been used instead of the more general travel demand assumptions used in the final PTMP EIS. All of the travel characteristics included in this analysis reflect a moderate level of effectiveness of transportation demand management (TDM) measures associated with all of the proposed alternatives, as was reflected in the final PTMP EIS transportation analysis.

Parking demand has also been estimated for midday weekday and weekend conditions, based on the methodology used in the final PTMP EIS. The parking demand analysis for the Main Post district expands the final PTMP EIS methodology to evaluate the reduction in parking demand that could be expected with more aggressive TDM measures in Alternatives 2 and 3, reflecting a ten-percent reduction in demand with Alternative 2 and a five-percent reduction in demand with Alternative 3.

Travel Demand At the time of publication of the final PTMP EIS in May 2002, the most recent version of the San Francisco County Transportation Authority (SFCTA) countywide travel demand forecasting model was used to develop the travel forecasts for proposed cumulative development and growth through the year 2020. The resulting cumulative impacts assessment for year 2020 conditions took into account both the future level of activity expected at the Presidio as well as the expected growth in housing and employment for the remainder of San Francisco and the nine-county Bay Area. Since publication of the final PTMP EIS, the SFCTA model has been updated for the horizon year 2030 as part of ongoing studies conducted for the Doyle Drive Environmental Impact Statement/ Report (EIS/R) being prepared by SFCTA, Federal Highway Administration (FHWA), and Caltrans (2005). The more recent model data reflect updates in Association of Bay Area Governments (ABAG) regional employment and population forecasts as well as the effect of the replacement of the current Doyle Drive structure.

The Doyle Drive replacement facility includes the replacement of the current structure with a parkway built to Caltrans standards that would provide direct vehicular access to the Presidio via Girard Avenue. The new direct connection to Doyle Drive would relieve some of the existing traffic congestion occurring at the Lombard Gate. Moving from east to west, US 101 is on Lombard Street and then diverges from Lombard Street to continue on Richardson Avenue for a short distance and then on the elevated Doyle Drive. Currently westbound traffic on US 101/Lombard Street must turn left to continue on Lombard Street where it becomes a local street and diverges from US 101/Richardson Avenue. Given the limited capacity of this westbound left-turn lane, the Doyle Drive/Girard Road access would become a primary entrance into the Presidio, with the Lombard Gate generally serving as a secondary entrance.

The 2030 SFCTA model data and information from the Doyle Drive EIS/R (which also considers a horizon year of 2030) were used to update the final PTMP EIS transportation analysis for the purposes of this SEIS. Because little was known about the influence of the Doyle Drive project on pass-through traffic at the time of publication of the final PTMP EIS, that analysis assumed that pass-through volumes on most routes would increase substantially. The Doyle Drive EIS/R suggests that the final PTMP EIS estimates of future pass-through volumes were overly conservative. The projected future traffic volumes used in this analysis have been adjusted to reflect the latest assessment of pass-through traffic as described in the draft Doyle Drive EIS/R.

Although the proportion of uses varies by alternative, at least 30 percent of the land uses in the Main Post would be office under any alternative. Because the amount of traffic generated by office use on weekends is typically 15 to 20 percent of weekday traffic, and because weekend traffic tends to be more evenly distributed across several hours rather than concentrated in peak commute periods, the weekday commute periods are still expected to be more congested than the peak hour of the weekend days. This perspective is substantiated by the analysis in the draft Doyle Drive EIS/R, which indicates that in 2030 nearby roadway segments and intersections would operate at the same or better level of service on weekends compared to weekday commute periods.

Trip Generation In order to estimate the number of new person trips that would be generated by each alternative, trip generation rates were developed for the different land use types (office, retail, residential, etc.). A trip generation rate expresses the number of person trips that would be generated by a unit of given land use type. Person trips for each alternative were calculated for weekday daily, AM peak hour, and PM peak hour conditions.

Trip generation rates from the final PTMP EIS were used for general land use types (e.g., office or warehouse). These trip generation rates were based on information obtained from the San Francisco Guidelines for Environmental Review, the Institute of Transportation Engineers Trip Generation Manual-Sixth Edition, the Caltrans' 15th Progress Report on Trip Ends Generation Research Counts, and the San Diego Traffic Generators Manual. The resulting person trip generation rates shown in Table 8 were developed to estimate the number of trips that were representative of the land uses expected on the Main Post.

Trip generation data for the Letterman Digital Arts Center were updated to reflect subleases for restaurant and office space. For the purposes of this analysis of conditions on the Main Post, specific trip generation rates

8 PERSON TRIP GENERATION RATES BY LAND USE

Land Use	*Daily Rate (number of person trips)*	*AM Peak Hour*			*PM Peak Hour*		
		Rate (number of person trips)	*In*	*Out*	*Rate (number of person trips)*	*In*	*Out*
Industrial/ Warehouse	6	0.60	80%	20%	0.90	20%	80%
Office	15	2.25	90%	10%	1.88	15%	85%
Retail	150	9.00	50%	50%	15.75	50%	50%
Restaurant	400	28	50%	50%	54	63%	37%
Lodging (rooms)	11	0.66	60%	40%	0.88	55%	45%
Conference	8.5	0.85	80%	20%	0.85	30%	70%
Presidio Bowling Center	45	2.48	60%	40%	4.50	50%	50%
YMCA Fitness Center	57	1.98	45%	55%	5.99	60%	40%
Cultural / Education	40	2.00	80%	20%	5.20	50%	50%
Theatre (seats)	1.13	0.05	90%	10%	0.26	50%	50%
Residential (units)	10	0.90	20%	80%	1.45	70%	30%
Infrastructure	1	0.50	90%	10%	0.50	15%	85%
Military	1.5	0.15	50%	50%	0.15	45%	55%
History Center	32.1	0.75	70%	30%	7.5	30%	70%
Walt Disney Family Museum	29.5	0.2	80%	20%	1.1	50%	50%

Source: Presidio Trust 2010

were developed for better defined projects such as a history center, a contemporary art museum, restaurants, the theatre, and the YMCA Fitness Center.

Attendance data for the 293,000-square-foot de Young Museum in Golden Gate Park were used to estimate trip generation for the proposed History Center in Alternative 3. In order to analyze museum attendance, the average Friday[37] visitation over the first six months of the de Young's opening was divided by six (to reflect a museum approximately one-sixth the size) to estimate daily trip generation for the 50,000-square-foot History Center in Alternative 3. This results in a daily person trip generation rate of 32.1 one-way trips per day. This trip generation rate corresponds to a daily attendance at the de Young Museum that is higher than the average weekday attendance in each month from July 2006 to June 2008.

In addition, more detailed, project-specific travel demand information was used for recently approved projects (e.g., Walt Disney Family Museum and International Center to End Violence) when available. Similarly, trip generation information was updated for other parts of the Presidio for which better, more specific information is now available, such as the restaurant on Ruger Street, upcoming projects in the Thornburg (west Letterman) district, and projects at the western end of Crissy Field (Area B).

[37] *Attendance on Fridays was typically higher than on other weekdays. Peak weekday attendance was used rather than weekend attendance because weekday peak commute period traffic conditions in and near the Presidio are typically worse than weekend traffic conditions.*

Some trips will be internal to the Presidio; examples include trips by a Presidio employee who also lives in the park, or by a Presidio employee who walks to a nearby restaurant for lunch. Because internal trips are more likely to be made by transit, walking, or bicycling than external trips, the separation of the two types of trips allowed for the application of different mode splits.

The mix of land uses expected within the Main Post (as well as the greater Presidio) would also create "linked" trips. Linked trips are internal trips that are made as intermediate stops on the way from an origin to a primary trip destination. For example, a Presidio employee who stops at the post office before traveling home would be a linked trip. The fact that some trips within the Presidio would be linked yields fewer trips than would occur otherwise.

Trip Distribution The geographic distribution of employee, visitor, and resident trips assumed in the final PTMP EIS was based on a survey of Presidio employees, the San Francisco Planning Department Guidelines for Environmental Review, and results from the San Francisco County Transportation Authority travel demand model. Trips were distributed to San Francisco, the East Bay, the North Bay, and the South Bay. Consistent with the San Francisco methodology for environmental review, the trips to and from San Francisco were further separated into four quadrants of the city, or superdistricts as described in the Citywide Travel Behavior Survey.

For the purposes of the final SEIS, this geographic distribution has been updated with data from a subsequent employee survey conducted by the Presidio Trust Transportation Department in 2005, and in the case of Alternatives 2 and 3, with information related to specific visitor uses

such as the History Center and lodge. The geographic distribution of trips in the final PTMP EIS assumed approximately 80 percent of trips would begin or end in San Francisco, including the Presidio. The 2005 employee survey suggests that only about 70 percent of Presidio employee and Presidio resident trips combined would begin or end in San Francisco.

The geographic distribution of the additional trips associated with the proposed changes in the Main Post, namely the cultural institutions and lodge, was based on survey data from the final EIRs for the de Young Museum and the California Academy of Sciences. The data for visitor trips to these cultural institutions suggest that only about 15 percent of trips to the History Center would originate in San Francisco and nearly one-third would be from outside the Bay Area, with the remaining portion coming from the East Bay, North Bay, and South Bay. It is expected that the lodge would similarly attract a significant proportion of guests from outside the San Francisco Bay Area.

Mode Split and Vehicle Occupancy As with the methodology used in the final PTMP EIS, mode split and vehicle occupancy for each of the alternatives vary by land use type and by whether the trip is external or internal to the Presidio. Project-generated person trips were assigned to travel modes in order to estimate the number of automobile, transit, and walk/bicycle trips. Mode split information used in the final PTMP EIS was obtained from the final General Management Plan Amendment EIS, Presidio employee and resident surveys, and the minimum performance standards of the TDM program.

The mode split for each alternative reflects implementation of improvements to encourage transit, pedestrian, and bicycle modes and discourage single-occupant vehicle travel; the overall modal split, which is the percentage of total trips that would occur via a private vehicle, transit, bicycle, or as a pedestrian, would vary by alternative. Auto person trips refer to person trips either as a driver or passenger in a private vehicle. To determine the number of vehicle trips generated by the number of auto person trips, an average vehicle occupancy was used. The assumed vehicle occupancy factor varies by land use. The chosen vehicle occupancy factors were based on the Citywide Travel Behavior Survey (CTBS) travel data published by the San Francisco Planning Department.

The mode split obtained for the different alternatives assumes implementation of TDM measures that would be phased in as more and more people work and live in the Presidio. Implementation of a TDM program would improve transit, pedestrian, and bicycle conditions and would thereby reduce auto usage to Presidio destinations. The TDM program includes the following:

- Mandatory participation and commitment to trip reduction requirements by all non-residential tenants
- A clean-fuel shuttle bus serving the entire Presidio with direct connections to Muni and Golden Gate Transit routes
- On-site sale of transit passes
- Transit and ridesharing information disseminated on kiosks within the park, on the Trust’s website, and at employee orientation programs
- Mandatory event-specific TDM programs for all special events

- Periodic monitoring of traffic volumes and mode choice among Presidio residents and employees
- Express bus service to regional transit connections (i.e., BART and the Transbay Terminal)
- Secure bicycle parking
- A parking management program

The TDM program consists of components that can be implemented to meet or exceed the intended traffic reductions. The TDM traffic reductions used in the final PTMP EIS and Main Post transportation analysis reflect the Trust's minimum performance standards. Since traffic reductions are likely to exceed what has been incorporated here, the traffic forecasts can be considered somewhat conservative. Additional TDM program components will be instituted or existing TDM program elements will be intensified to achieve additional automobile trip reductions as transit service and other alternative transportation opportunities are expanded.

As part of the TDM program, a series of parking management measures would be implemented to reduce parking demand in the Main Post, although the parking management measures under Alternatives 2 and 3 would be more intensive than those under Alternative 1 and those previously considered in the final PTMP EIS. The current popularity of the PresidiGo Downtown shuttle service suggests that parking fees will cause some employee and resident motorists to shift to transit service, particularly if that service is free (PresidiGo) or subsidized by employers. It is expected that parking fees will also cause many drive-alone motorists to switch to carpooling. Implementation of parking fees is expected to reduce parking demand by approximately ten percent under Alternative 2 and by about 2.5 percent under Alternative 3. In order to avoid overestimating the beneficial effect on traffic conditions, the more intensive parking management measures in Alternatives 2 and 3 are not reflected in the trip generation estimates or traffic analysis. However, the effect of the reduced parking demand and the associated reduction in needed supply are considered in the analysis of parking conditions.

Table 9 presents the projected daily, AM peak hour, and PM peak hour travel demand estimates for the Main Post by mode for typical weekday conditions for the four alternatives. Daily and peak hour travel demand would vary by alternative, depending on the land use elements contained in the alternatives and the intensity of use. The number of weekday daily person trips would range from approximately 24,600 under Alternative 4 to approximately 32,570 under Alternative 2. In general, 7 to 9 percent of the daily trips generated by each alternative would occur during the AM peak hour, and 11 to 13 percent would occur during the PM peak hour. During the AM peak hour, the number of vehicle trips generated by the alternatives would range from between 949 vehicle trips under Alternative 3 to about 1,124 vehicle trips under Alternative 2. Vehicle trips would be somewhat higher during the PM peak hour and would range from 1,359 vehicle trips under Alternative 4 to 1,808 vehicle trips under Alternative 2.

9 MAIN POST TRIP GENERATION BY MODE OF TRAVEL AND BY ALTERNATIVE (WEEKDAY DAILY, AM PEAK HOUR, AND PM PEAK HOUR)

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
WEEKDAY DAILY				
Person Trips				
Automobile	18,556	19,899	15,782	14,975
Transit	6,144	6,609	5,076	5,099
Bike/Walk/Other	5,529	6,061	4,680	4,526
Total	30,229	32,569	25,538	24,600
Vehicle Trips	13,951	14,955	11,894	11,630
WEEKDAY AM PEAK HOUR				
Person Trips				
Automobile	1,294	1,393	1,127	1,144
Transit	451	481	398	412
Bike/Walk/Other	398	433	348	356
Total	2,143	2,307	1,873	1,912
Vehicle Trips	1,057	1,124	949	974
Percent of Daily Trips	7.6%	7.5%	8.0%	8.4%
WEEKDAY PM PEAK HOUR				
Person Trips				
Automobile	2,197	2,417	1,970	1,748
Transit	731	805	611	603
Bike/Walk/Other	637	726	569	524
Total	3,565	3,948	3,150	2,875
Vehicle Trips	1,637	1,808	1,448	1,359
Percent of Daily Trips	11.7%	12.1%	12.2%	11.7%

Source: Presidio Trust 2010

The relationships among building square footages and types of land use across alternatives are reflected in the trip generation estimates. Although the total square footage under Alternative 2 would be slightly less than under Alternative 1, the projected number of trips is slightly greater due to the relative increase in visitor-oriented uses and decrease in office and residential uses. Alternative 2 would generate 7 percent more daily vehicle trips than Alternative 1, and Alternatives 3 and 4 would generate 15 to 17 percent fewer vehicle trips than Alternative 1, respectively.

Although a different mode share and vehicle occupancy rate were assumed for each land use, composite mode share and vehicle occupancy rates were estimated for each alternative as shown in Table 10. The mode share under Alternatives 2, 3, and 4 would be very similar to the mode share under Alternative 1.

Parking Demand Parking demand for the alternatives consists of both long-term demand (i.e., employee and resident parking) and short-term demand (i.e., visitor parking). Long-term parking for non-residential uses was estimated by determining the number of employees for each land use and applying the average mode split and vehicle occupancy from the trip generation estimates for both external and internal trips. Each employee vehicle trip was assumed to require one space per day. The parking demand for lodging was estimated as long-term only, with a rate of 1.0 space per room, which accounts for both employees and guests. Since most of the housing on the Main Post consists of large units (e.g., Infantry Terrace), a long-term rate of 2.5 spaces per housing unit was used for all housing units for evenings and weekends, and a rate of 1.25 spaces per unit was used for the midday weekday period.

Short-term parking was estimated based on the total daily visitor trips and the average turnover rate. Consistent with assumptions in the final PTMP EIS transportation analysis, a short-term parking turnover rate of 6 vehicles per space per day was applied to most land uses for all alternatives, with the exception of retail and cultural/educational uses for which a turnover rate of 10 vehicles per space per day was used, and conference uses for which a turnover rate of 3 vehicles per space per day was used. A turnover rate of 4 or 4.5 was used for recreational and museum uses based on data from the final de Young Museum EIR. Detailed parking demand calculations by alternative are provided in Appendix A.

Table 11 presents the estimated weekday and weekend parking demand for all alternatives. Different land uses experience peak parking demand at different times of the day, and some uses such as museums experience peak demand on weekends rather than weekdays. Each of the alternatives would experience the peak demand during the midday weekday period, but the parking demand associated with very large weekend special events would have to be managed to ensure adequate parking supply in the Main Post district. The parking demand for Alternative 1 would be similar to that anticipated in the final PTMP EIS. Alternative 4 would generate the lowest weekday parking demand of 2,018 spaces, approximately 7 percent less than Alternative 1. The parking demand under Alternative 2 would be approximately the same as under Alternative 1. Alternatives with fewer visitor-oriented or residential uses and a higher percentage of office space (e.g., Alternatives 3 and 4) would have a weekend parking demand that is less similar to midday weekday demand, compared to other alternatives.

10 MAIN POST COMPOSITE MODE SHARE AND VEHICLE OCCUPANCY RATE BY ALTERNATIVE (WEEKDAY DAILY, AM PEAK HOUR, AND PM PEAK HOUR)

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
WEEKDAY DAILY				
Mode Share				
Automobile	61%	61%	62%	61%
Transit	20%	20%	20%	21%
Bike/Walk/Other	18%	19%	18%	18%
Vehicle Occupancy Rate	1.33	1.33	1.33	1.29
WEEKDAY AM PEAK HOUR				
Mode Share				
Automobile	60%	60%	60%	60%
Transit	21%	21%	21%	22%
Bike/Walk/Other	19%	19%	19%	19%
Vehicle Occupancy Rate	1.23	1.24	1.19	1.17
WEEKDAY PM PEAK HOUR				
Mode Share				
Automobile	62%	61%	63%	61%
Transit	21%	20%	19%	21%
Bike/Walk/Other	18%	18%	18%	18%
Vehicle Occupancy Rate	1.34	1.34	1.36	1.29

Source: Presidio Trust 2010

Note: Percentages do not always total 100 due to rounding.

11 PARKING DEMAND BY ALTERNATIVE

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
Number of Parking Spaces Needed				
Midday Weekday	2,163	2,159	2,028	2,018
Weekend	1,546	1,552	1,276	1,237
Ratio of Weekend to Midday Weekday Demand	0.71	0.72	0.63	0.61

Source: Presidio Trust 2010

Traffic Impacts

The potential impacts of development within the Main Post district on future traffic conditions on Presidio and city roadways were analyzed on pages 302 through 320 of the final PTMP EIS. The analysis assumed the road network would be simplified and clarified by establishing a hierarchy of routes, providing additional signage, closing some roads to auto traffic to provide for recreational use, and reducing traffic on some roads. As described in the subsequent 2007 Main Parade EA, three roadway segments in the Main Post would be closed to vehicular traffic: Sheridan Avenue between Montgomery Street and Graham Street, Arguello Boulevard between Moraga Avenue and Sheridan Avenue, and Anza Street. Doyle Drive will be reconstructed and will establish Girard Road as a new access point to the park. In addition to anticipated growth in vehicles traveling to and from the Main Post and the larger Presidio, the final PTMP EIS projected that regional growth throughout San Francisco and the greater Bay Area would contribute to increased traffic on roadways near the Presidio.

Proposed development throughout the park under the PTMP was estimated to generate 44,407 daily one-way vehicle trips, and Main Post uses were estimated to generate approximately 11,860 daily vehicle trips. The final PTMP EIS and the subsequent final Public Health Service Hospital (PHSH) EIS concluded that, following mitigation, local intersections would operate at acceptable levels except for the intersection of Lincoln/Bowley/Pershing, which would operate at LOS E, partially due to growth in overall regional traffic passing through the park. Strategies for reducing single-occupancy vehicle trips identified in PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring* would reduce vehicular delays at local intersections.

For this SEIS analysis, future 2030 traffic volumes were developed for each of the alternatives for all study intersections. Baseline 2030 traffic volumes were derived from the 2020 traffic volumes in the final PTMP EIS and then modified to reflect anticipated growth between 2020 and 2030 and findings of the Doyle Drive EIS/R, including that study's prediction of the Doyle Drive parkway alternative's effect on pass-through traffic.

The new Girard Road Gate provided as part of the reconstruction of Doyle Drive would also accommodate a substantial portion of the additional trips generated by the alternatives as well as pass-through traffic. The Doyle Drive EIS/R estimates that pass-through traffic will increase slightly through the Arguello Gate but decrease slightly through the Presidio and Lombard Gates.

Intersection Operational Analysis Based on the future projected traffic conditions, and the estimated traffic volumes for each of the alternatives, future 2030 traffic operating conditions were calculated for the study intersections for AM and PM peak hour conditions, as shown in Tables 12 and 13, respectively. For unsignalized one-way or two-way stop-controlled intersections, the level of service (LOS) and delay per vehicle are presented for the approach that would experience the highest delay. For all-way stop-controlled or signalized intersections, the overall intersection LOS and average delay per vehicle are presented. When forecasted intersection volumes exceed capacity substantially, the calculated intersection delay increases exponentially absent any mitigation to reduce volume or increase capacity. For these intersections, the forecasted delay is noted as greater than 70 seconds in Tables 12 and 13. The detailed LOS calculation sheets for each study intersection are presented in Appendix A.

All 20 study intersections could be mitigated to an acceptable level of service (LOS D or better) through improvements identified in the final PTMP EIS or additional mitigation measures identified in this analysis. Some study intersections are in the City and County of San Francisco (CCSF or city), and any identified improvements at these intersections would be beyond the jurisdiction of the Trust. The Trust would coordinate with the CCSF to implement any improvements.

Significance Criteria Although specific significance thresholds were not used to determine whether a transportation impact is significant or not, several factors were considered in making this determination. Table 14 provides a comparison of these factors to the significance thresholds used by the CCSF Planning Department for impacts at unsignalized intersections.

Alternative 1 This alternative would generate 13,951 daily vehicle trips, including 1,057 AM peak hour trips and 1,637 PM peak hour trips. As shown in Table 15, of the 20 studied intersections, eight would operate at unacceptable levels (LOS E or F) during the AM peak hour, and seven during the PM peak hour under this alternative. The current traffic volumes at the intersection of Arguello/Washington are higher in the AM peak hour than in the PM peak hour, likely due to the nearby schools. The contribution of the traffic generated by the Main Post is greater in the PM peak hour than in the AM peak hour. However, the total intersection traffic volume is greater in the AM peak hour, and the intersection is expected to operate unacceptably in the AM peak hour but acceptably in the PM peak hour.

The poor operating conditions at these intersections reflect the increase in traffic volumes traveling to and from the Presidio and relatively modest increases in traffic resulting from regional growth. Seven of the eight intersections expected to operate at LOS E or F were forecast to operate at LOS E or F in the final PTMP EIS. The intersection of Lincoln/Halleck was *not* expected to operate at an unacceptable level of service in the final PTMP EIS. In the final PTMP EIS, this intersection was analyzed with two lanes in each direction on Lincoln, reflecting the geometric modifications originally described in the 1994 NPS General

12 YEAR 2030 AM PEAK HOUR LEVELS OF SERVICE

	Intersection	*Existing Control Device*	*PTMP Mitigation Control Device*	*Existing Conditions*		*Alternative 1*		*Alternative 2*		*Alternative 3*		*Alternative 4*	
				LOS	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*	*LOS*	*Delay (sec/ veh)*
1	Lombard/Richardson	Signal	n.a.	A	7.0	A	6.5	A	6.6	A	6.3	A	6.3
2	Lombard/Divisadero	Signal	n.a.	B	12.4	B	15.1	B	15.5	B	14.6	B	14.5
3	Lombard/Lyon	AWSC	Signal	**F**	**68.4**	**E**	**37.4**	**E**	**39.4**	C	20.0	D	34.3
4	Greenwich/Divisadero	AWSC	n.a.	B	12.8	B	14.1	B	14.1	B	14.1	B	14.1
5	Greenwich/Lyon	AWSC	n.a.	A	8.3	A	8.6	A	8.6	A	8.6	A	8.6
6	Richardson/Francisco	Signal	n.a.	B	11.7	B	15.4	B	15.6	B	15.0	B	15.0
7	Richardson/Gorgas	Signal	n.a.	A	6.7	A	8.1	A	8.2	A	8.0	A	8.0
8	Doyle/Marina/Mason	Signal	n.a.	C	26.5	C	34.0	C	34.0	C	34.0	C	34.0
9	Lincoln/Graham	AWSC	n.a.	B	10.7	D	28.2	D	28.6	**E**	**35.3**	C	21.4
10	Lincoln/Halleck	TWSC	n.a.	C	22.2	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
11	Lincoln/Girard	TWSC	Signal	B	14.6	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
12	Lincoln/Letterman/Presidio	AWSC	Signal	C	18.4	C	24.0	D	25.3	C	16.6	C	22.9
13	Lombard/Presidio	AWSC	Signal	**E**	**42.9**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
14	Presidio/Pacific	AWSC	Signal	D	28.5	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**67.9**	**F**	**68.6**
15	Presidio/Jackson	AWSC	Signal	**E**	**37.1**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
16	Presidio/Washington	AWSC	Signal	C	22.9	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
17	Arguello/Jackson	AWSC	Signal	C	15.4	B	14.8	B	15.0	B	14.6	B	14.6
18	Arguello/Washington	AWSC	Signal	C	22.6	**E**	**46.1**	**E**	**47.4**	**E**	**44.7**	**E**	**45.2**
19	Arguello/Moraga	TWSC	Signal	B	10.4	C	16.0	C	16.0	B	13.9	C	15.7
20	Sheridan/Montgomery	AWSC	n.a.	B	14.3	C	22.8	C	22.8	C	18.9	C	19.9

Source: Presidio Trust 2010

Notes: AWSC = all-way stop control LOS = level of service
TWSC = two-way stop control sec/veh = seconds per vehicle n.a. = not applicable
For signalized and AWSC intersections, the LOS and average delay per vehicle are presented for overall intersection operations.
For TWSC intersections, the LOS and delay are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*

13 YEAR 2030 PM PEAK HOUR LEVELS OF SERVICE

	Intersection	Existing Control Device	PTMP Mitigation Control Device	Existing Conditions		Alternative 1		Alternative 2		Alternative 3		Alternative 4	
				LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)
1	Lombard/Richardson	Signal	n.a.	A	4.5	A	8.2	A	8.7	A	7.2	A	6.9
2	Lombard/Divisadero	Signal	n.a.	B	12.0	B	15.0	B	16.5	B	14.1	B	13.9
3	Lombard/Lyon	AWSC	Signal	**E**	**38.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**55.1**	**F**	**> 70.0**
4	Greenwich/Divisadero	AWSC	n.a.	B	13.0	B	13.9	B	14.0	B	13.9	B	13.8
5	Greenwich/Lyon	AWSC	n.a.	A	8.3	A	8.4	A	8.4	A	8.4	A	8.3
6	Richardson/Francisco	Signal	n.a.	B	11.5	B	16.4	B	18.0	B	15.2	B	15.1
7	Richardson/Gorgas	Signal	n.a.	A	7.2	A	9.2	B	10.1	B	10.4	A	7.0
8	Doyle/Marina/Mason	Signal	n.a.	B	11.0	C	26.3	C	26.9	C	25.7	C	25.6
9	Lincoln/Graham	AWSC	n.a.	B	10.5	C	21.6	C	23.9	D	28.0	B	14.0
10	Lincoln/Halleck	TWSC	n.a.	C	19.9	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
11	Lincoln/Girard	TWSC	Signal	B	14.3	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
12	Lincoln/Letterman/Presidio	AWSC	Signal	B	12.7	D	27.0	**E**	**35.6**	C	16.7	C	20.9
13	Lombard/Presidio	AWSC	Signal	C	24.7	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
14	Presidio/Pacific	AWSC	Signal	C	23.4	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**68.8**	**F**	**67.3**
15	Presidio/Jackson	AWSC	Signal	D	29.6	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
16	Presidio/Washington	AWSC	Signal	C	21.5	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**	**F**	**> 70.0**
17	Arguello/Jackson	AWSC	Signal	B	14.0	C	20.5	C	21.3	C	19.8	C	19.3
18	Arguello/Washington	AWSC	Signal	C	18.6	D	27.4	D	28.9	D	26.0	D	25.3
19	Arguello/Moraga	TWSC	Signal	B	10.1	C	16.0	C	16.2	B	14.0	C	15.3
20.	Sheridan/Montgomery	AWSC	n.a.	A	8.2	B	10.2	B	10.2	A	10.0	A	9.4

Source: Presidio Trust 2010

Notes: AWSC = all-way stop control LOS = level of service
TWSC = two-way stop control sec/veh = seconds per vehicle n.a. = not applicable
For signalized and AWSC intersections the LOS and average delay per vehicle are presented for overall intersection operations.
For TWSC intersections, the LOS and average delay per vehicle are presented for the worst approach.
***Bold** type indicates unacceptable operating conditions (LOS E or LOS F).*

14 COMPARISON OF FACTORS USED IN EVALUATING THE RELATIVE SIGNIFICANCE OF TRANSPORTATION IMPACTS AT UNSIGNALIZED INTERSECTIONS

CCSF	*Trust*
Potentially significant if project-related traffic: • causes the level of service (LOS) at the worst approach to deteriorate from LOS D or better to LOS E or F, and Caltrans signal warrants would be met; or • causes Caltrans signal warrants to be met when the worst approach is already operating at LOS E or F.	Potentially significant if project-related traffic at two-way stop-controlled intersections: • causes Caltrans signal warrants to be met, and contributes considerably to the cumulative traffic increases that would cause the level of service at the worst approach to deteriorate from LOS D or better to LOS E or F; or • causes Caltrans signal warrants to be met, and contributes considerably to cumulative traffic increases that would cause the average delay per vehicle to worsen considerably on the worst approach already operating at LOS E or F conditions. Potentially significant if project-related traffic at all-way stop-controlled intersections: • contributes considerably to the cumulative traffic increases that would cause a deterioration in LOS from LOS D or better to LOS E or F, or from LOS E to LOS F; and • causes Caltrans signal warrants to be met.

Source: Presidio Trust 2010

Management Plan Amendment (GMPA). In this analysis for the Main Post Update SEIS, the future lane configuration is assumed to be the same as it is currently. Mitigation measures that would improve the operation of all eight intersections to LOS D or better are described at the end of this section.

Five of the eight intersections expected to operate unacceptably (Lombard/Lyon, Presidio/Pacific, Presidio/Jackson, Presidio/Washington, and Arguello/Washington) are located in the city. Improvements at these intersections would be beyond the jurisdiction of the Trust, and the Trust would coordinate any improvements with the CCSF.

Alternative 2 Alternative 2 would generate 14,955 daily vehicle trips, including 1,124 AM peak hour trips and 1,808 PM peak hour trips. The roadway network associated with Alternative 2 would be the same as under Alternative 1, as presented in the draft SEIS. Some of the additional traffic generated by this alternative would be related to the lodge and is expected from travelers from outside San Francisco. Consequently, it is expected that this traffic would enter the park via the Doyle Drive ramps and Girard Road. Compared to Alternative 1, Alternative 2 would generate 6 and 10 percent more vehicular traffic in the AM and PM peak hours. Most levels of service would be the same as with Alternative 1, but the delay per vehicle would be slightly higher at

15 INTERSECTIONS OPERATING AT LOS E OR F BY ALTERNATIVE

Intersection	*Jurisdiction*	*AM Peak Hour*				*PM Peak Hour*			
		Alt.1	*Alt. 2*	*Alt. 3*	*Alt. 4*	*Alt.1*	*Alt. 2*	*Alt. 3*	*Alt. 4*
Lombard/Lyon	CCSF	X	X			X	X	X	X
Lincoln/Graham	Trust			**X**					
Lincoln/Halleck	Trust	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Lincoln/Girard	Trust	X	X	X	X	X	X	X	X
Lincoln/Letterman/Presidio	Trust						X		
Lombard/Presidio	Trust	X	X	X	X	X	X	X	X
Presidio/Pacific	CCSF	X	X	X	X	X	X	X	X
Presidio/Jackson	CCSF	X	X	X	X	X	X	X	X
Presidio/Washington	CCSF	X	X	X	X	X	X	X	X
Arguello/Washington	CCSF	X	X	X	X				

Source: Presidio Trust 2010

*Note: Intersections not expected to operate at LOS E or F in the final PTMP EIS are highlighted in **bold**.*
CCSF = City and County of San Francisco.

most intersections. With Alternative 2, the same number of intersections (eight) would operate at LOS E or F in the AM peak hour and one additional intersection would operate at LOS E or F in the PM peak hour. At an average delay of 35.6 seconds per vehicle, the intersection of Letterman/Lincoln/Presidio would barely be operating at LOS E (the threshold between LOS D and LOS E is 35 seconds per vehicle) with Alternative 2. The northbound through movement is expected to be a congested traffic movement, but the northbound left-turn movement to Presidio Boulevard is not. Motorists destined for the Main Post would likely learn over time to turn left and approach the Main Post from Presidio Boulevard rather than continuing on Lincoln Boulevard.

As shown in Table 15, of the 20 studied intersections, eight would operate at unacceptable levels (LOS E or F) under Alternative 2 during both the AM peak hour and PM peak hour. The current traffic volumes at the intersection of Arguello/Washington are higher in the AM peak hour than the PM peak hour, likely due to nearby schools. The contribution of the traffic generated by the Main Post is greater in the PM peak hour than in the AM peak hour. However, the total intersection

traffic volume is greater in the AM peak hour, and the intersection is expected to operate unacceptably in the AM peak hour but acceptably in the PM peak hour. The poor operating conditions at these intersections reflect the increase in traffic volumes traveling to and from the Presidio and relatively modest increases in traffic resulting from regional growth. All but one of the intersections expected to operate at LOS E or F were forecast to operate at LOS E or F in the final PTMP EIS. The intersection of Lincoln/Halleck was *not* expected to operate at an unacceptable level of service in the final PTMP EIS. In the final PTMP EIS, this intersection was analyzed with two lanes in each direction on Lincoln, reflecting the geometric modifications originally described in the final GMPA EIS. In this analysis, the future lane configuration is assumed to be the same as it is currently with a bike lane in each direction, travel lane in each direction and left-turn pocket. Mitigation measures that would improve the operation of all intersections to LOS D or better are described at the end of this section.

Five of the eight intersections expected to operate unacceptably (Lombard/Lyon, Presidio/Pacific, Presidio/Jackson, Presidio/Washington, and Arguello/Washington) are located in the city. Improvements at these intersections would be beyond the jurisdiction of the Trust, and any improvements would be subject to the approval of the CCSF.

Alternative 3 Proposed improvements to El Presidio under this alternative would include closing one block of Graham Street to through traffic and eliminating parking at the site of El Presidio. These modifications to traffic circulation would divert more traffic to Graham Street and Lincoln Boulevard. In the PM peak hour, approximately 450 additional vehicles would be diverted through the Lincoln/Graham intersection. The intersection would operate at LOS E in the AM peak hour and LOS D in the PM peak hour. The unacceptable operating conditions in the AM peak hour would be partially due to the closure of some streets to vehicular traffic.

This alternative is estimated to generate 11,894 daily vehicle trips, including 949 AM and 1,448 PM peak hour vehicle trips. These trip estimates are slightly less than those for Alternative 1. In both the AM peak hour and PM peak hour, Alternative 3 would result in unacceptable service levels (LOS E or F) at the same number of intersections as Alternative 1. In the PM peak hour, these intersections would be the same as under Alternative 1. In the AM peak hour, the intersection of Lincoln/Graham would operate unacceptably, rather than Lombard/Lyon under Alternative 1. Mitigation measures that would improve the operation of all nine intersections to LOS D or better are described at the end of this section. The Lincoln/Halleck intersection would operate at an unacceptable level of service due to the change in lane configuration on Lincoln Boulevard.

As described in the final PTMP EIS, improvements at the five intersections in the city would be beyond the jurisdiction of the Trust, and implementation of these improvements would require coordination with the CCSF. This alternative includes strategies for reducing single-occupancy vehicle trips, which could reduce vehicular delays below the levels described in the discussion of traffic impacts.

Alternative 4 This alternative is estimated to generate 11,630 daily vehicle trips, including 974 AM peak hour and 1,359 PM peak hour vehicle trips. In both the AM peak hour and PM peak hour, Alternative 4 would result in unacceptable service levels (LOS E or F) at seven

intersections – one fewer than Alternative 1 in the AM peak hour and the same intersections as Alternative 1 in the PM peak hour. The Lincoln/Halleck intersection was *not* expected to operate at an unacceptable level of service in the final PTMP EIS due to the future intersection improvements assumed in baseline conditions.

All of these intersections would operate at acceptable levels with the mitigation measures identified at the end of this section. Improvements at the five intersections located in the city would be beyond the jurisdiction of the Trust, and any improvements would be subject to the approval of the CCSF.

Parking Impacts

Assumptions for parking management considered in the final PTMP EIS analysis and in planning for the Main Parade improvements were provided on page 51 of the PTMP. These included developing policies for managing parking supplies and reducing the demand for parking. These policies would be coordinated with other transportation programs to create a coherent, effective approach to discouraging automobile use and promoting more sustainable means of travel and commuting. Tools would include fees for employee parking during the workday, time restrictions, designated tenant and residential parking areas, designated carpool and vanpool parking, and special events coordination. Future planning efforts would decrease the number of parking spaces in the park without impeding the Trust's ability to attract tenants to reuse historic buildings. The number of parking spaces on the Main Post would remain about the same as it is today. Parking facilities would be concentrated near main activity areas and would be designed to accommodate the average demand rather than peak demand during the peak period (e.g., midday weekday, evening, or weekend day). Parking areas may be redesigned or relocated to simplify access or to reduce their visual impacts. Large parking areas would be removed, and smaller peripheral parking lots would be built. Parking would be sufficient to meet tenants' needs and avoid exacerbating parking problems in adjacent neighborhoods.

An analysis of future parking demand and supply for the Main Post under the PTMP was provided on pages 314 through 315 of the final PTMP EIS. The PTMP committed to reduce the overall number of parking spaces at the Presidio, but to provide sufficient parking in each district of the Presidio to meet that district's average demand during the peak period (midday weekday, evening, or peak weekend day). At the Main Post, future parking demand was estimated to be about 2,015 parking spaces. In the final PTMP EIS, approximately 2,115 spaces were proposed to accommodate this demand. The parking demand estimates and supply accounted for shared use of parking, a moderate degree of parking management (including fees), and management of resources to accommodate special events.

As required by PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring*, the Trust has implemented a Transportation Demand Management (TDM) program within the district to reduce automobile usage by all tenants, occupants, and visitors. If TDM goals are not being reached, the Trust would implement more aggressive strategies or intensify components of the existing program, such as requiring tenant participation in more TDM program elements and/or providing more frequent and/or extensive shuttle service.

For the final SEIS analysis, a general description of the number of parking spaces in key locations in the district under each alternative is provided, and the parking areas in which the number of spaces would differ significantly across alternatives are illustrated in Table 16. Many parking areas would remain unchanged, and the amount of on-street parking would be similar across alternatives. These parking areas are also illustrated in Figures 3, 6, 9, and 12.

Table 17 presents a summary of the weekday parking demand, as compared to supply, for each alternative. To provide an estimated range of TDM effectiveness, Alternative 2 reflects a 10-percent reduction in demand associated with implementation of parking fees and restrictions, and Alternative 3 reflects a more modest 5-percent reduction in demand.

The parking demand estimates and supply account for shared use of parking in the district. District-wide parking demand on weekends is expected to be 400 to 800 spaces less than on weekdays. Under all alternatives, special events would be scheduled and coordinated based on parking availability, and events would be regulated to ensure that supply meets expected demand. Events requiring large amounts of parking would not be scheduled concurrently with other events or Presidio peak parking demand periods. Special events with extraordinarily large parking needs would need to consider a shuttle service to/from other parts of the Presidio. PTMP EIS Mitigation Measure TR-21 *Special Event Parking Management* would ensure that events would be coordinated so that combined parking demand would not exceed parking supply.

The Trust has been actively involved in the Doyle Drive design process, in which the construction of a parking garage against the bluff at the north edge of the Main Post is being considered. If a garage at this location is feasible, this reservoir of parking would be located immediately north of the transit center, making it convenient for employees and visitors of buildings at the north end of the Main Post as well as people boarding a shuttle to reach the rest of the park.

Alternative 1 Without any underground parking, and without the demolition of Building 385, this alternative would provide 1,817 parking spaces and is estimated to have a demand for 2,098 spaces, resulting in a 281-space (13-percent) deficit. The lack of an access ramp to underground parking at the north bluff would allow approximately 25 more surface spaces. This alternative reflects a moderate degree of TDM measures and would not substantially increase auto occupancy or reduce auto mode share beyond the level anticipated in the final PTMP EIS. Without more aggressive TDM strategies, finding parking in the Main Post would be difficult, and motorists may go to Crissy Field to find parking.

Alternative 2 As shown in Table 16, Alternative 2 would provide approximately 1,910 spaces in the district and is estimated to generate demand for slightly fewer spaces, resulting in a negligible surplus of spaces. The parking would include up to 300 underground spaces in up to two locations: under the lodge (up to 50 self-park spaces), and up to 300 spaces in a garage at the north bluff. Due to existing lease provisions, approximately 75 spaces would remain at the site of El Presidio in the foreseeable future. Parking closest to most uses would be managed with measures such as time restrictions to make the most convenient parking available for short-term visitors. Regardless of location, the majority of parking would be within a five-minute walk

16 MAIN POST PARKING SUPPLY BY ALTERNATIVE

	Alternative 1 (number of parking spaces)	*Alternative 2 (number of parking spaces)*	*Alternative 3 (number of parking spaces)*	*Alternative 4 (number of parking spaces)*
Unaffected Surface Lots	435	435	440	440
On-Street	360	308	330	360
ALTERNATIVE PARKING SITES				
Building 93/97 Area	90	0	0	90
North Bluff: Lot Expansion	100	75	75	100
North Bluff (Underground)	0	up to 300	285	0
Lot South of Sal Street/North of El Presidio	25	25	25	25
Behind Buildings 101-104	182	182	182	182
Behind Building 100	35	35	35	35
Behind Building 42	30	30	30	30
West of Presidio Theatre	0	0	30	30
Building 385 Site	70	235	70	70
Lodge (Underground)	0	up to 50	n.a.	n.a.
Southern End of Main Parade (Underground)	0	0	150	n.a.
El Presidio	250	75	0	250
North of Building 65	40	0	40	40
YMCA Fitness Center	140	150	140	140
East of YMCA Fitness Center	60	60	60	60
TOTAL SUPPLY	**1,817**	**1,910**	**1,892**	**1,852**
Total Underground	0	up to 300	435	0

Source: Presidio Trust 2010

Notes: XXX = Underground parking. n.a. = not applicable

Parking supply excludes Infantry Terrace residential neighborhood.

Total parking supply for Alternative 2 would be approximately 1,910, with underground spaces in two possible locations including the north bluff and under the lodge. The total number of underground spaces would not exceed 300 spaces.

17 COMPARISON OF MAIN POST WEEKDAY PARKING DEMAND AND SUPPLY BY ALTERNATIVE

	Alternative 1 (number of parking spaces)	*Alternative 2 (number of parking spaces)*	*Alternative 3 (number of parking spaces)*	*Alternative 4 (number of parking spaces)*
Estimated Demand	2,098	2,102	1,973	1,963
TDM Adjustment	–	(210)	(99)	–
Adjusted Demand	2,098	1,892	1,874	1,963
Supply	1,817	1,910	1,892	1,852
SURPLUS/DEFICIT	**-281**	**18**	**18**	**-111**

Source: Presidio Trust 2010

Note: Parking demand and supply excludes Infantry Terrace residential neighborhood.

(approximately 1,500 feet) of any building in the Main Post. Relocating parking from the center of the Main Post to the periphery would be supported with parking management strategies that would encourage long-term parking (e.g., employees parking all day) in the lots at the greatest distance from most uses in the Main Post.

Alternative 3 Under this alternative, there would be no parking within El Presidio. Demand would be about 11 percent less than under Alternative 1, but the number of surface spaces would be 20 percent less than under Alternative 1. A combination of a modest (5 percent) TDM reduction in demand and 435 underground parking spaces would allow supply to accommodate estimated demand with a negligible surplus of spaces.

Alternative 4 Approximately 250 spaces would remain at the site of El Presidio under this alternative. In total, about 1,852 parking spaces would be provided. There would be no underground parking at the north bluff, and the lack of an access ramp to underground parking would allow approximately 25 more surface spaces at the north bluff. This alternative is estimated to generate a parking demand for about 1,963 parking spaces, resulting in a deficit of an estimated 111 spaces.

Impacts on Pedestrian and Bicycle Facilities

Bicycle access and pedestrian circulation within the Main Post were reviewed as part of the Presidio Trails and Bikeways Master Plan. The plan calls for a network of pedestrian and multi-use trails through the Main Post as part of continuous corridors. The Presidio Promenade is one of these trails and would generally follow Lincoln Boulevard to connect the Main Post to the Golden Gate Bridge/Coastal Trail to the west and the Lombard Gate and the Letterman district on the park's eastern edge.

Implementation of any of the alternatives would result in an increase in pedestrian and bicycle activity within the Main Post and on streets adjacent

to the key gates. Under all alternatives, approximately 18 percent of all trips generated by the land uses are anticipated to occur by walking and bicycling as the primary mode. In addition, people coming to the Presidio by auto or transit would also walk from transit stops and parking areas. The increase in pedestrian and bicycle activity would generally be accommodated within the existing pedestrian and bicycle network. Planned improvements to the pedestrian and bicycle network described in the Presidio Trails and Bikeways Master Plan would improve conditions for pedestrians and cyclists and facilitate the safe and direct flow of pedestrians and bicyclists to and from the different parts of the Presidio. Implementation of the Presidio Trails and Bikeways Master Plan and other improvements such as the Anza Esplanade should ensure that bicycle and pedestrian facilities are adequate to meet the demand generated.

Impacts on Public Transit Services

Land uses associated with the alternatives would generate transit trips for several Bay Area transit providers and would most affect the transit providers that directly serve the Main Post (Muni and the Presidio's shuttle, PresidiGo). Transit trips to and from the Main Post were estimated based on the expected geographic distribution of trips and mode split. Because some transit passengers may use more than one transit mode (e.g., transfer from PresidiGo to BART), the sum of transit trips for each transit provider may exceed the total number of transit passengers generated by each alternative.

At the time the final PTMP EIS was adopted, downtown PresidiGo service was not anticipated. To reflect the addition of this transit service, the transit methodology used in the final PTMP EIS was updated for the draft Main Post Update SEIS. The changes effectively substituted PresidiGo Downtown service for the then skeletal 82X Muni service. In order to reflect the popularity of Downtown PresidiGo service, more transit trips have been assigned to PresidiGo Downtown service than were previously assigned to 82X Muni service. Furthermore, the employee survey completed after publication of the final PTMP EIS suggests slightly more Presidio employees traveling to and from the East Bay than were assumed in the final PTMP EIS. To the extent that the geographic distribution of trips generated by the lodge and cultural/educational uses reflects more trips from outside San Francisco, those changes have been accounted for in the assignment of transit trips across transit service providers. The transit hub at the north end of the Main Post would facilitate transfers between Muni buses and the Presidio shuttle buses. Since publication of the draft SEIS, two additional changes in Muni service have occurred. First, all 29-Sunset Muni service now terminates at Baker Beach, eliminating direct service to the Main Post. Muni 29 passengers must transfer to/from PresidiGo at Baker Beach. Secondly, the 82X service to the Presidio has been eliminated altogether. These changes in Muni service will affect the transit choices of passengers throughout the park, and the transit analysis has been updated to reflect these changes.

The San Francisco Municipal Transportation Agency (SFMTA) Transit Effectiveness Project (TEP) proposal includes a number of changes for Muni service in and near the Presidio. A summary of TEP changes by route is provided in Table 18 below. The TEP service changes were approved by the SFMTA Board in October 2009. Although the termination of all 29-Sunset service at Baker Beach and the elimination of 82X service to the Presidio were implemented as part of the service changes in December 2009, many of the improvements (e.g., routing the

18 MUNI TRANSIT EFFECTIVENESS PROJECT PROPOSED SERVICE CHANGES

Route	*Proposed Changes*
28–19th Avenue	• Increase service frequency to 5 minutes on Park Presidio Boulevard and 19th Avenue (28 & 28L route combined service) • Terminate at Golden Gate Bridge during most hours (service to Marina neighborhood would be provided by 28L; service to Fort Mason would be provided by 43 route) • Provide OWL (late night) coverage of Marina neighborhood via 28 route when 28L route is not running
28L–19th Avenue Limited	• Extend to intersection of Van Ness Avenue and North Point Street on Lombard Street and to intersection of Mission Street and Geneva Avenue via I-280 • Extend limited-stop service from 4:00PM to 9:00PM • 28L route would not serve the Golden Gate Bridge toll plaza; service to bridge would be provided by 28-local route, PresidiGo shuttle, and Golden Gate Transit (GGT); transfers to GGT would be made at Richardson Avenue / Francisco Street intersection
29–Sunset	• Service would be rerouted to Baker Beach Housing along Pershing Drive and would not continue farther into the Presidio due to low ridership • Provide direct route on Ocean Avenue to Balboa Park BART/Muni station (instead of Mission Street to Geneva Avenue) • Provide two-way service on Gilman Avenue to simplify route to Monster Park • Discontinue service on Fitzgerald Avenue
41–Union	• Discontinue outer segment beyond Steiner Street • Increase service frequency during AM peak
43–Masonic	• Extend from Chestnut Street/Fillmore Street intersection to Fort Mason (Marina Boulevard/Laguna Street intersection), replacing the existing 28-line terminal • Modify service in the Presidio to connect to the Presidio Transit Center and exit the Presidio at the Gorgas Avenue Gate rather than Lombard Gate

Source: www.sfmta.com

43-Masonic service to the Main Post Transit Center) have not yet been implemented. The elimination of the Golden Gate Bridge toll plaza stop from the 28 route would eliminate a key transfer point between Muni and the PresidiGo shuttle. Presidio employees, residents, and visitors would have to walk two or more blocks in order to transfer between PresidiGo and the Muni 28 (near Park Presidio/Lake) or 28L (Richardson/Gorgas) route.

Table 19 summarizes the expected AM peak hour and PM peak hour transit trips to and from the entire Presidio by transit service provider for each alternative. The Main Post would comprise 30 to 40 percent of the peak hour ridership, depending on the alternative. PresidiGo is expected to carry over one-third of all transit trips to and from the Main Post. The increase in Muni ridership to and from the Main Post would be distributed among the bus lines serving the Presidio and its vicinity, according to the expected geographic distribution of trips to and from the Presidio. The 43-Masonic is expected to carry about 20 percent of transit trips to and from the Main Post, and the 28-19th Avenue and 29-Sunset combined are expected to carry about 20 percent of the transit trips to and from the Main Post. With TEP service changes, more Main Post transit riders destined for the Sunset and Richmond neighborhoods may choose to take the 43-Masonic route out of the park rather than boarding at the Richardson/Francisco intersection, and this assumption is reflected in ridership assumptions. (See Appendix A for more detailed transit ridership assumptions.) The increase in ridership on Golden Gate Transit would be distributed among the approximately 20 Golden Gate Transit routes that serve the Presidio.

Alternative 1 Alternative 1 would generate 6,144 daily transit person trips, including 451 AM and 731 PM peak hour transit person trips. Since some transit person trips use more than one mode, the total number of trips in Table 19 sums to more than the number of transit person trips. The transit trips generated by the Main Post under Alternative 1 would comprise 34 percent of the total peak hour Presidio-wide transit ridership reflected in Table 19. The number of AM and PM peak hour transit trips generated by Alternative 1 is approximately 2.5 to 3 times the estimated number of transit trips currently generated by uses in the Main Post. In total, the final PTMP EIS assumed 1,117 and 1,621 Muni riders in the AM and PM peak hours, respectively. With the emergence of the PresidiGo Downtown service, Muni ridership is expected to be reduced by 31 to 36 percent from the levels forecast in the final PTMP EIS, depending on the alternative and peak hour.

The more recent geographic distribution data suggest that more people will travel to and from the North Bay than expected at the time the final PTMP EIS was published. Therefore, Golden Gate Transit ridership is expected to be 35 to 55 percent greater under Alternative 1 than anticipated in the final PTMP EIS. According to the Golden Gate Bridge, Highway and Transportation District's latest Short-Range Transit Plan (December 2007), overall Golden Gate Transit regional bus ridership is expected to decrease by about 3 percent annually over the next ten years, making more capacity available for this expected increase in ridership.

Ridership on PresidiGo Downtown service is near capacity today during peak months, and additional capacity will be needed to keep pace with increasing demand. If Muni does not increase capacity by 2030, the cumulative ridership due to regional growth trends and implementation of the PTMP and proposed projects in the Main Post could exceed capacity on one or more routes. Mitigation called for in the final PTMP

19 PRESIDIO-WIDE TRANSIT RIDERSHIP (NUMBER OF TRIPS) BY TRANSIT PROVIDER AND BY ALTERNATIVE (AM PEAK HOUR AND PM PEAK HOUR)

	Transit Service Provider					
	Muni	*PresidiGo*	*AC Transit*	*BART*	*Golden Gate Transit*	*Caltrain*
AM PEAK HOUR						
Alternative 1	770	410	70	230	173	49
Alternative 2	776	427	73	253	173	54
Alternative 3	743	396	68	230	165	49
Alternative 4	756	395	67	216	170	46
PM PEAK HOUR						
Alternative 1	1,034	666	111	460	227	102
Alternative 2	1,097	643	105	365	250	78
Alternative 3	941	642	109	502	197	113
Alternative 4	970	622	104	443	209	98

Source: Presidio Trust 2010

Note: The sum of transit trips presented in this table are greater than the number of employees, residents and visitors choosing to ride transit shown in Table 9 because this table shows all transit trips generated by the Presidio. In addition, some transit passengers may ride more than one transit service (e.g., someone who rides BART and PresidiGo).

EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 1 on transit service.

Alternative 2 This alternative is estimated to generate 481 AM and 805 PM peak hour transit person trips. The Main Post under Alternative 2 would contribute 36 percent to the total Presidio-wide transit ridership in the AM and PM peak hours. Ridership on all transit providers would be comparable to or slightly greater than Alternative 1 in the AM peak hour and comparable to or slightly less than Alternative 1 in the PM peak hour. PTMP mitigation measures, including support of increased frequency on Muni lines, PresidiGo shuttle service, and monitoring of

Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of this alternative on transit service.

Alternative 3 On a daily basis, this alternative is estimated to generate the fewest daily transit trips of all alternatives. The alternative would generate about 398 AM and 611 PM peak hour transit person trips, 12 to 16 percent fewer than Alternative 1. The transit trips generated by the Main Post under Alternative 3 would comprise 30 percent of the total Presidio-wide transit ridership described in Table 19. Ridership on all transit providers would be comparable to Alternative 1 in the AM peak hour and within approximately 10 percent in the PM peak hour. Mitigation called for in the final PTMP EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 4 on transit service.

Alternative 4 This alternative would generate approximately the same number of transit trips as Alternative 3 (slightly more on a daily basis and in the AM peak hour and slightly fewer in the PM peak hour). The alternative would generate about 412 AM peak hour and 603 PM peak hour transit trips, 9 to 18 percent fewer than Alternative 1. Ridership on all transit providers would be slightly less than under Alternative 1 in both the AM and PM peak hour. The Main Post under Alternative 4 would comprise 30 percent of the total Presidio-wide transit peak hour ridership. Mitigation called for in the final PTMP EIS, including increased frequency on Muni lines, PresidiGo service, and monitoring of Golden Gate Transit routes and coordination with Golden Gate Transit, would reduce the effects of Alternative 4 on transit service.

Impacts Due to Construction Traffic

The short-term impact of construction traffic on the roadway network due to construction activities within the Main Post district and elsewhere within the Presidio was discussed on page 321 of the final PTMP EIS. The discussion concluded that, because construction vehicle trips traveling to and from the district would be dispersed, the vehicle trips on other regional roadways would not be substantial and would generally fall within the normal fluctuations of traffic. PTMP EIS Mitigation Measure TR-23 *Construction Traffic Management Plan* would require contractors to work with the Trust to develop a plan including information on construction phases and duration, scheduling, proposed haul routes, permit parking, staging area management, visitor safety, detour routes, and alternative pedestrian routes.

Under all alternatives, construction activities at the Main Post would include rehabilitation of existing buildings, structural improvements and other seismic work, road improvements, utility upgrades, and other infrastructure enhancements. For construction of new structures, the following phases would generally be included: demolition, excavation, and installation of foundations, building structure, finishes, and landscaping. Construction vehicles would include trucks hauling construction debris and delivering construction materials and supplies, as well as construction worker vehicles. The volume of construction vehicles traveling to and from the Presidio would vary, depending on the specific construction activity and the schedules of the various building elements of each of the alternatives. For individual projects, the duration of demolition and construction would be relatively short-term.

Construction-related traffic, especially larger construction vehicles, could create some conflicts with local and regional traffic. Because construction vehicle trips traveling to and from the Presidio would be dispersed through the Bay Area, however, the vehicle trips on other regional roadways would not be substantial and would generally fall within the normal fluctuations of traffic. A comprehensive Construction Traffic Management Plan, as discussed in PTMP Mitigation Measure TR-26, would be developed to provide specific routes and other measures to minimize potential traffic impacts.

Construction vehicles would generally enter the Presidio via Richardson Avenue, Doyle Drive, or the Golden Gate Bridge toll plaza. Truck traffic would comply with city truck restrictions on nearby streets (e.g., Marina Boulevard and Lyon Street). The amount of construction-related traffic would generally correlate to the amount of new construction and demolition with each alternative (see Table 2). Construction activities for individual projects would need to be carefully coordinated with other individual projects as well as the Doyle Drive project.

MITIGATION MEASURES

This section presents the transportation mitigation measures that would be required to reduce the impacts of the alternatives to less-than-significant levels.

Traffic

Traffic impacts at all of the study intersections could be mitigated to acceptable operating conditions of LOS D or better. Table 20 presents the intersections that would require mitigation by alternative. Table 21 presents the unmitigated and mitigated LOS for the intersections where mitigation measures have been identified for the AM and PM peak hours, respectively. Appendix A contains the detailed LOS calculation sheets for the mitigated intersections. Some of the improvements assumed as part of the baseline conditions in the final PTMP EIS analysis were not assumed as part of the baseline conditions in this analysis; these improvements include the realignment of Halleck Street to intersect with Lincoln Boulevard and Anza Street, and the provision of two lanes in each direction on Lincoln Boulevard. Mitigation Measures TR-1, TR-4, TR-12, TR-14, and TR-24 through TR-27 are measures adapted from the final PTMP EIS, while Mitigation Measures TR-28 and TR-29 are new additional measures developed to minimize the effects of implementation of the Main Post alternatives. Any mitigation measures including signalization of these ten intersections would be considered as a last resort. TDM measures such as more frequent and/or extensive PresidiGo service, modifications to parking fees or restrictions, and enhanced carpooling or vanpooling incentives will be considered and implemented before signalization.

Signalization is identified as the mitigation measure for the intersections of Lincoln/Graham and Lincoln/Halleck. These two study intersections are in the center of the Main Post district. Although the Trust has identified signalization as the mitigation measure as required by the NEPA, the Trust does not intend to signalize these intersections due to the potential impact on historic resources. The intersection of Lincoln/Graham is least likely to exceed significance thresholds, and would only do so under Alternative 3 in the AM peak hour. The intersection of Lincoln/Halleck is currently stop-controlled on the minor (Halleck Street) approach only and operates at LOS C in both peak

20 INTERSECTION MITIGATION MEASURES BY ALTERNATIVE

Mitigated Intersection	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
TR-1 Presidio/Pacific	AM/PM	AM/PM	AM/PM	AM/PM
TR-4 Lombard/Presidio	AM/PM	AM/PM	AM/PM	AM/PM
TR-12 Lyon/Lombard	AM/PM	AM/PM	PM	PM
TR-14 Letterman/Presidio/Lincoln	–	PM	–	–
TR-24 Presidio/Jackson	AM/PM	AM/PM	AM/PM	AM/PM
TR-25 Presidio/Washington	AM/PM	AM/PM	AM/PM	AM/PM
TR-26 Arguello/Washington	AM	AM	AM	AM
TR-27 Lincoln/Girard	AM/PM	AM/PM	AM/PM	AM/PM
TR-28 Lincoln/Graham			AM	
TR-29 Lincoln/Halleck	AM/PM	AM/PM	AM/PM	AM/PM

Source: Presidio Trust 2010

hours. Although implementing all-way stop control is not forecasted to improve the operation of this intersection to LOS D or better in year 2030, it would improve operating conditions from the current one-way stop control.

TR-1 *Presidio Boulevard/Pacific Avenue Intersection Improvements* When needed (i.e., prior to the level of service deteriorating to LOS E or F), install a traffic signal. Signalization of the intersection of Presidio Boulevard/Pacific Avenue would improve the operation of the intersection to an acceptable level of service. If the CCSF determines that signalization is appropriate, the Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-4 *Lombard Street/Presidio Boulevard Intersection Improvements* When needed (i.e., prior to the level of service deteriorating to LOS E or F), signalize the intersection. The final PTMP EIS called for both signalization and widening of the south leg of the intersection to facilitate an additional northbound right-turn lane. However, signalization alone will improve the operation of this intersection to an acceptable level of service and no additional mitigation would be necessary.

21 UNMITIGATED AND MITIGATED LEVELS OF SERVICE

Mitigated Intersection	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
AM PEAK HOUR				
TR-1 Presidio/Pacific	F/A	F/A	F/A	F/A
TR-4 Lombard/Presidio	F/C	F/C	F/B	F/B
TR-12 Lyon/Lombard	E/B	E/B	--	--
TR-14 Letterman/Presidio/Lincoln	--	--	--	--
TR-24 Presidio/Jackson	F/B	F/B	F/B	F/B
TR-25 Presidio/Washington	F/A	F/A	F/A	F/A
TR-26 Arguello/Washington	E/D	E/D	E/D	E/D
TR-27 Lincoln/Girard	F/B	F/B	F/C	F/B
TR-28 Lincoln/Graham	--	--	E/B	--
TR-29 Lincoln/Halleck	F/B	F/B	F/B	F/B
PM PEAK HOUR				
TR-1 Presidio/Pacific	F/A	F/A	F/A	F/A
TR-4 Lombard/Presidio	F/C	F/C	F/C	F/C
TR-12 Lyon/Lombard	F/B	F/B	F/B	F/B
TR-14 Letterman/Presidio/Lincoln	--	E/A	--	--
TR-24 Presidio/Jackson	F/B	F/B	F/B	F/B
TR-25 Presidio/Washington	F/A	F/A	F/A	F/A
TR-26 Arguello/Washington	--	--	--	--
TR-27 Lincoln/Girard	F/B	F/B	F/B	F/B
TR-28 Lincoln/Graham	--	--	--	--
TR-29 Lincoln/Halleck	F/B	F/B	F/B	F/B

Source: Presidio Trust 2010

Note: Unmitigated LOS / Mitigated LOS *LOS = level of service*

TR-12 *Lyon Street/Lombard Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The final PTMP EIS called for both signalization and restriping the eastbound approach to provide an exclusive left-turn lane and a shared right-through lane. However, because of the new Doyle Drive access ramps at Girard Road, some traffic would be diverted away from the Lombard Gate, and signalization alone will adequately improve the operation of the intersection to an acceptable level of service. Should the CCSF decide to signalize the intersection, the Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-14 *Letterman Drive/Presidio Boulevard/Lincoln Boulevard Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), install a signal. The final PTMP EIS called for widening Lincoln Boulevard north of this intersection and restriping the northbound left-turn lane to a shared left-through lane. However, a signal alone would improve the operation of this intersection to an acceptable level.

TR-24 *Presidio Avenue/Jackson Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-25 *Presidio Avenue/Washington Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-26 *Arguello Boulevard/Washington Street Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection. The Trust will coordinate with the CCSF to determine the contribution of each party to the cost of the improvements.

TR-27 *Lincoln Boulevard/Girard Road Intersection Improvements* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

TR-28 *Lincoln Boulevard/Graham Street Intersection Improvements (new)* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

TR-29 *Lincoln Boulevard/Halleck Street Intersection Improvements (new)* When needed (i.e., prior to the intersection operations deteriorating to LOS E or F), signalize the intersection.

Parking

The following mitigation measures identified in the final PTMP EIS would adequately mitigate parking-related impacts.

TR-18 *Presidio-Wide Parking Management* In order to reduce impacts of fee parking in Area B on parts of the Presidio outside the Trust's jurisdiction (Area A), the NPS is encouraged to implement parking regulations, time limits, and/or parking fees in potentially affected parking areas under its administration (notably, Crissy Field). The Trust will provide assistance to the NPS to ensure coordination and consistency of parking management within both Areas A and B. Should the NPS choose not to adopt or enforce this measure, or is otherwise opposed to it,

implementation of parking management control in Area B would affect parking for Crissy Field (Area B).

TR-19 *TDM Program Monitoring* The Trust implements a TDM program to reduce automobile usage by all tenants, occupants, and visitors (see Appendix D of the PTMP for full description). The Trust will periodically monitor implementation and effectiveness of the TDM program. If the TDM performance standards as described in the PTMP are not being reached, the Trust will implement more aggressive TDM strategies or intensify components of the existing TDM program such as requiring tenant participation in more TDM program elements, and more frequent and/or extensive shuttle service.

TR-21 *Special Event Parking Management* The Presidio TDM program includes a comprehensive array of parking management strategies implemented through Trust administration of park-sponsored activities and special event permitting processes including coordination with the NPS. The Trust will continue to recommend these TDM measures to discourage single-occupant automobile usage, encourage alternative modes of travel, and maximize use of available parking resources. Special events that could result in overflow parking will be coordinated to ensure that parking supply is not exceeded. Special events will be scheduled based on parking availability and will be regulated to ensure that supply meets expected demand, including demand from Area A of the Presidio. Events requiring large amounts of parking will not be scheduled concurrently with other events or Presidio peak parking demand periods if combined parking demand would exceed the available supply within Area B of the Presidio. Sponsors may be required to provide special transit and bicycle services during their events to reduce expected parking demand and promote use of public transit, biking, walking, and remote parking lots.

Pedestrians and Bicycles

The following final PTMP EIS mitigation measure, combined with the bikeway and trail improvements outlined in the Presidio Trails and Bikeways Master Plan, would provide a pedestrian and bicycle network that would adequately accommodate pedestrians and bicycles without creating hazards, barriers, or access restrictions for pedestrians and bicyclists.

TR-9 *Pedestrian/Bicycle Amenities* The Trust will provide bicycle and pedestrian amenities such as shelters, benches, water fountains, secure bicycle racks, route lighting, and other facilities throughout the Presidio to encourage travel by foot and bicycle.

Public Transit Services

The following mitigation measures identified in the final PTMP EIS would adequately mitigate impacts on public transit services.

TR-10 *Support Increased Muni Frequencies* Muni is encouraged to increase frequency of service on existing Muni lines as warranted. Increased frequency on existing Muni lines with or without any extensions of these lines would increase the transit peak hour capacity, and consequently reduce passenger load factors on these lines. If service on Muni routes serving the Presidio is reduced from current levels, the Trust will increase PresidiGo service levels to accommodate the displaced transit demand and coordinate with Muni to improve transfers between PresidiGo and Muni.

TR-22 *Transit Service Monitoring Program* The Trust will continue to monitor Muni operations and passenger loads within the Presidio. Continued monitoring of Muni service in the Presidio, and similar monitoring of Golden Gate Transit service at the Presidio would indicate any capacity problems, particularly on northbound Golden Gate Transit bus service during the PM peak hour. If the monitoring were to reveal insufficient capacity for northbound Presidio-generated passengers during the PM peak hour, potential improvements will be coordinated with the Golden Gate Bridge, Highway and Transportation District.

Construction Traffic

The following mitigation measure identified in the final PTMP EIS would adequately mitigate impacts due to construction traffic.

TR-23 *Construction Traffic Management Plan* During pre-construction activities, the contractor(s) of individual projects will work with the Trust to develop a Construction Traffic Management Plan. The plan will include information on construction phases and duration, scheduling, proposed haul routes, permit parking, staging area management, visitor safety, detour routes, and pedestrian movements on adjacent routes. Construction Traffic Management Plans for individual projects will be reviewed with consideration of other individual projects in the Main Post as well as Doyle Drive reconstruction.

REFERENCES

Caltrans. no date. *15th Progress Report on Trip Ends Generation Research Counts*.

City and County of San Francisco, San Francisco Planning Department. 2000. *New de Young Museum Final Environmental Impact Report*. Dated July 22.

_____ . 2002. *Transportation Impact Analysis Guidelines for Environmental Review*. Dated October.

_____ . 2003. *California Academy of Sciences Final Environmental Impact Report*. Dated July.

City of San Diego. 1998. *Trip Generation Manual*. Dated September.

DKS Associates. 2004. *Doyle Drive Final Traffic and Transit Operations Report.* Dated December.

Golden Gate Bridge, Highway and Transportation District. 2007. *Short-Range Transit Plan: Fiscal Years 2008-2017*. Dated December.

Institute of Transportation Engineers (ITE). 1997. *Trip Generation Manual-Sixth Edition*.

National Park Service (NPS). 1994. *Final General Management Plan Amendment EIS.* Dated July.

National Park Service (NPS) and Presidio Trust. 2003. *Presidio Trails and Bikeways Master Plan and Environmental Assessment*. Dated July.

Nelson Nygaard Consulting Associates. 2006. *Disney Family Museum and Library Project Traffic Study*. Dated July.

Presidio Trust. 2005. *Presidio Employee Transportation Survey Results*. Dated September.

Robert Peccia and Associates. 1996. *Presidio Traffic Update Report of Findings*. Dated December.

San Francisco County Transportation Authority. 2008. *Final Environmental Impact Statement/Report and Final Section 4(f) Evaluation, South Access to the Golden Gate Bridge (Doyle Drive).* Dated September.

San Francisco Municipal Transportation Agency. 2008. *Service Standards Report: Q2 FY08 (Oct-Dec 2007)*. Dated March 18.

Transportation Research Board, National Research Council. 2000. *Highway Capacity Manual*.

Wilbur Smith Associates. 2002. *Presidio Trust Management Plan Background Transportation Report for the Final EIS*. Dated May.

3.4 Air Quality

AFFECTED ENVIRONMENT

The existing air quality environment of the Presidio and its regulatory context are described on pages 124 to 126 of the final PTMP EIS. This description is incorporated herein by reference. Updated information relevant to the Main Post district is summarized below.

Air Quality Management

The nine-county San Francisco Bay Area Air Basin has a history of recorded violations of federal and state ambient air quality standards for ozone, carbon monoxide (CO), and inhalable particulate matter less than ten microns in diameter (PM10). The U.S. Environmental Protection Agency (EPA) has classified the Bay Area as a marginal non-attainment area for ozone and as a maintenance (attainment) area for carbon monoxide. The EPA strengthened the federal ambient air quality standard for particulate matter less than 2.5 microns in diameter (PM2.5) in 2006, and a non-attainment designation became effective for the Bay Area for the federal 2006 PM2.5 standard in 2009. The California Air Resources Board (CARB) has given the Bay Area state-level non-attainment status for ozone, PM10, and PM2.5.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for managing compliance with the ambient air quality standards in the Bay Area. With the State Implementation Plan (SIP) and the Clean Air Plan (CAP), the BAAQMD identifies the steps that must be taken to attain and maintain the state and federal standards, respectively. Local jurisdictions can cooperate with these efforts by implementing transportation control measures to reduce emissions from motor vehicles. The Trust's transportation demand management (TDM) program implements the relevant transportation control measures from the 2000 BAAQMD CAP and will insure consistency with the recently adopted 2010 Clean Air Plan (BAAQMD 2010a), which includes updated transportation control measures to improve transit services, encourage sustainable travel behavior, support focused growth, and implement pricing strategies.

The State of California does not require a plan for attaining the PM10 or PM2.5 standards. In lieu of a formal plan, the BAAQMD developed a list of potential PM control measures as part of the regional Particulate Matter Implementation Schedule adopted on November 16, 2005. The Particulate Matter Implementation Schedule led to implementation of new BAAQMD regulations for stationary sources in the region, namely through expansion of the wood burning control program. The recent federal PM2.5 non-attainment designation requires the BAAQMD to develop a PM2.5 attainment plan by 2012, and the 2010 Clean Air Plan lays the foundation for this. Although a formal plan for PM attainment is not yet established, measures that control gaseous pollutants from motor vehicles (such as ozone precursors) are also useful for controlling PM10 and PM2.5.

In order to ensure that federal actions would not disrupt attainment of goals, proposed actions must include a formal conformity determination if total direct and indirect emissions of non-attainment pollutants exceed specified thresholds. For any federal action in the Bay Area causing more than 100 tons per year of an ozone precursor (either reactive organic gases [ROG] or nitrogen oxides [NOx]), PM2.5 or sulfur dioxide as a PM2.5

precursor, or CO, the general conformity rule would apply (40 CFR 93.153). Federal actions causing emissions below these thresholds are presumed to conform to the SIP.

The Trust manages the air quality effects of land use development by managing construction activities and the demand for transportation. Development at the Presidio must conform to the Presidio-wide TDM program that would reduce emissions from motor vehicle sources. The Trust also coordinates land uses to avoid locating "sensitive receptors" (housing, lodging, and other uses that might have occupants who are sensitive to air pollution) near substantial sources of pollution. Through these efforts, the Trust can ensure that its actions will be consistent with the SIP and the CAP and that it will not disrupt efforts to attain the ambient air quality standards.

Air Quality Conditions and Monitoring

Air quality at the Presidio is generally superior to that of most urban areas because the park is generally upwind of most sources of pollution. Violations of the state and federal standards for ozone persist in the Bay Area inland from San Francisco. Pollutants from San Francisco tend to be carried into the more sheltered areas of the region and cause violations of the standards there. Because of the city's location and climate, neither federal nor state ozone standards have recently been exceeded in San Francisco. Concentrations of carbon monoxide in the Bay Area have complied with federal and state standards since 1991. However, the state standards for PM10 and PM2.5 and the 2006 federal standard for PM2.5 have recently been exceeded in San Francisco. Additional information about ambient air quality data is available in the final PTMP EIS (pages 125 to 126).

Toxic air contaminants also affect the region. Because the effects of these contaminants are largely localized, ambient standards are not used to characterize their concentrations. Contaminants that are emitted primarily from motor vehicles account for over one-half of the average calculated cancer risk for Bay Area residents. Due largely to reductions in air toxics from motor vehicles, the calculated average cancer risk has been significantly reduced in recent years. Based on the most recent regional annual report (ambient monitoring data from 2003), the calculated cancer risk is 145 in one million, which is 53 percent less than what was observed eight years earlier (BAAQMD 2007). Although diesel particulate matter is not specifically monitored, it may significantly contribute to a cancer risk that is greater than all other measured toxics combined.

Local Sources of Air Pollution

Traffic-related emissions of criteria pollutants and toxics are generated along the roadways leading to and located within the Main Post district and along the region-serving roadways such as Doyle Drive. Motor vehicles are the primary source of ozone precursors, and traffic congestion can occasionally result in localized elevated concentrations (hotspots) of carbon monoxide under certain stagnant weather conditions. Diesel trucks, buses, and construction equipment are sources of toxic diesel particulate matter. High volumes of traffic cause elevated risks along Doyle Drive. No notable stationary sources are within the Main Post district other than small heaters or boilers that are exempt from permitting requirements. Land uses that are most sensitive to odors and toxic air contaminants include residences (on Riley Avenue, Funston Avenue, and Infantry Terrace), Adult Day Health Care (ADHC) centers, schools or child care

facilities (including the Bay School of San Francisco in Building 35, and the Presidio Child Development Center in Building 387), and lodging.

Global Climate Change

Greenhouse gases (GHG), including carbon dioxide (CO_2), contribute to global climate change. In 1997, the Council on Environmental Quality (CEQ) released guidance on how to address cumulative effects in NEPA documents, and one example of a cumulative effect was climate change. Draft NEPA guidance (CEQ 2010) indicates that a level of 25,000 metric tons of direct GHG emissions annually would be an indicator that decision makers and the public would find a quantitative and qualitative assessment of GHG meaningful. The EPA established this level as a threshold for mandatory reporting of GHG, and additional regulations to address GHG emissions from major stationary sources, motor vehicles, and fuel use under the federal Clean Air Act remain under development. As the EPA evaluates strategies for addressing GHG emissions, recent California laws establish GHG targets and programs for control. This analysis provides information on how Trust actions would affect GHG emissions.

Due to California's particular vulnerability to climate change, the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB32), was signed into effect on September 27, 2006. In passing the bill, the California Legislature found that

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems* (California Health & Safety Code, Section 38500, Division 25.5, Part 1).

Recognizing that global climate change imposes "compelling and extraordinary impacts" on California, the Governor signed Executive Order S-3-05 (June 2005) which established climate change emission reduction targets for the state and set in motion a process to ensure the targets are met. In late 2007, the CARB approved a statewide GHG emissions limit for 2020 that is equal to the statewide GHG emission level in 1990 of 427 million metric tons of carbon dioxide equivalent (MMTCO2e). This CARB-approved limit for 2020 represents a goal of reducing emissions by about 28 to 33 percent from "business as usual" (CAPCOA 2008). In December 2008, the CARB approved the AB32 Climate Change Scoping Plan to achieve the targeted reductions (CARB 2008).

Emissions of CO_2 occur largely from combustion of fossil fuels. The major categories of CO_2 sources from fossil fuel combustion can be broken into sectors for residential, commercial, industrial, transportation, and electricity generation. The transportation sector includes all motor gasoline and diesel fuel combustion. The GHG emissions of this sector are not split into activities or uses (e.g., there are not separate estimates for GHG emissions caused by gasoline or diesel fuel combustion related to statewide construction activities compared to fuel use for other activities). Other GHG emissions such as methane (CH_4) and nitrous oxide (N_2O) are also tracked by state inventories but occur in much smaller quantities. Strategies that the state should pursue for managing GHG emissions in California are identified in the CARB Scoping Plan (CARB 2008), which

builds upon the overall climate policies of the California Climate Action Team (CAT) Report to the Governor (CalEPA 2006).

The CARB Scoping Plan and CAT strategies providing the largest reductions focus on generally reducing consumption of petroleum across all areas of the California economy and improving forest management. Increasing transportation energy efficiency (through fuel economy, low carbon fuels, and reduced travel), building/appliance energy efficiency, use of alternatives to petroleum-based fuels (use of renewable energy), controls on high global warming potential gases (like methane), and carbon storage in forests are expected to provide substantial reductions by 2020 (CalEPA 2006 and CARB 2008).

The Presidio, because of its location and unique, protected resources, is a place where the effects of climate change could become particularly noticeable. With its establishment in 1996, the Trust was given responsibility to protect the park's significant natural, historic, scenic, cultural, and recreational resources. As knowledge about climate change and its effects has accumulated, the Trust acknowledges the need to conduct its environmental, transportation, and energy-related activities in support of its mission in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on air quality, expanded to address global climate change (see below). Construction or demolition activities and use of heavy equipment that creates fugitive dust particulate matter and exhaust emissions including toxic diesel particulate matter are analyzed through a comparison with the BAAQMD recommendations for particulate matter control measures applicable to all construction activities. Emissions of other contaminants (ROG, NOx, and CO) that would occur in the exhaust from heavy equipment are included in the regionwide inventory that is the basis for regional attainment and are not expected to impede attainment of maintenance of the ambient air quality standards. Demolition, renovation, or removal of asbestos-containing building materials is subject to BAAQMD Regulation 11, Rule 2. Through environmental review, permit compliance and contracting processes, the Trust ensures that activities within its jurisdiction comply with such air quality rules.

The analysis of emissions that would be caused throughout the region by new motor vehicle trips and increased consumption of natural gas and other energy related to development of the alternatives relies on estimates using the Urbemis2007 emission model developed by the CARB. Mobile source emission estimates reflect the implementation of the Trust TDM program, which would minimize the activity of mobile sources (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*).[38] Area source estimates also provided by Urbemis2007 account for the emissions that could be associated with any foreseeable small new stationary sources (e.g., hot water boilers) that may be necessary to provide basic utilities, even though none has been specifically proposed for any alternative. Any new sources for heating or steam generation would likely be small enough to be exempt from BAAQMD permit requirements or would otherwise

[38] *CAP revisions made since preparation of the final PTMP EIS incorporate the growth anticipated under the PTMP.*

comply with all applicable regulatory requirements and permit conditions such that no notable sources of air pollutants would occur.

Table 22 quantifies the total emissions of criteria pollutants and carbon dioxide (CO_2) due to mobile sources and area sources related to the new vehicle trips and land uses for each of the alternatives. For projects subject to the California Environmental Quality Act (CEQA), the BAAQMD recently adopted threshold of significance levels of 54 pounds per day for ROG, NOx, and PM2.5 and 82 pounds per day for PM10 (BAAQMD 2010b). Emissions from mobile and area sources at levels exceeding these thresholds would be considered significant in the regional context.

The analysis of the potential for localized carbon monoxide (CO) violations relies on reviewing the most congested and most poorly performing roadways or intersections and comparing the level of traffic generated by each alternative with traffic levels at intersections that could possibly have high CO concentrations. Emissions from traffic at congested intersections can, under certain circumstances, cause a localized build-up of CO concentrations. Regional ambient air quality monitoring data demonstrate that CO concentrations have recently been well below the applicable standards. The potential for localized increases in CO concentrations from increased traffic has been greatly reduced in recent years. This is because improvements in motor vehicle exhaust controls since the early 1990s and the use of oxygenated fuels have drastically reduced vehicle CO emissions. Even with increased traffic caused by Main Post development, none of the alternatives would be likely to cause a violation of the CO standards.[39]

General Conformity

Federal actions that cause emissions of non-attainment pollutants are required to complete a formal conformity determination when total direct and indirect emissions caused by the action exceed specified thresholds (40 CFR 93.153). None of the alternatives under consideration for the Main Post Update would disrupt goals of attainment. Implementation of the TDM program would ensure consistency with the CAP, and conformity with the SIP would be ensured in light of the relatively small scale of the proposed demolition and construction activities. The final PTMP EIS (page 389) found that, based on the scale of the proposed demolition and construction activities, it is highly unlikely that the 100-ton conformity applicability threshold would be exceeded by construction activities during any single year of the phased build-out.[40] Construction and demolition activities associated with any of the alternatives would not be likely to exceed the 100-ton-per-year threshold of the general conformity rule.

[39] *This impact is discussed in more detail on page 255 of the final PTMP EIS.*

[40] *Using the Urbemis2007 computer model allows preliminary estimates, although emissions would vary between alternatives and development timelines. One year of new construction involving site preparation and building construction using a crane, three smaller lifts, and eight other pieces of active heavy equipment would cause approximately 20 tons of ROG, NOx, and CO; less than 0.1 ton of SO_2; 10 tons of PM10; and 1 ton of diesel particulate matter (as PM2.5).*

22 ESTIMATED AVERAGE WEEKDAY EMISSIONS FROM VEHICLE TRIPS AND AREA SOURCES BY ALTERNATIVE

	Alternative 1: PTMP Visitor and Community Center	*Alternative 2: Main Post Update* (Net of Alternative 1)		*Alternative 3: History Center* (Net of Alternative 1)		*Alternative 4: Status Quo* (Net of Alternative 1)	
Average Weekday Vehicle Trips (trips/day)	13,951	14,955	*(+1,004)*	11,894	*(-3,061)*	11,630	*(-264)*
Reactive Organic Gases (ROG) (pounds/day)	62.20	62.22	*(+0.02)*	52.43	*(-9.77)*	54.04	*(-16.52)*
Nitrogen Oxides (NOx) (pounds/day)	63.44	66.98	*(+3.54)*	55.63	*(-7.81)*	54.63	*(-22.14)*
Carbon Monoxide (CO) (pounds/day)	452.70	479.87	*(+27.17)*	393.33	*(-59.37)*	385.26	*(-164.49)*
Sulfur Dioxide (SO_2) (pounds/day)	1.14	1.21	*(+0.07)*	0.97	*(-0.17)*	0.96	*(-0.42)*
Particulate Matter (PM10) (pounds/day)	190.16	202.02	*(+11.86)*	164.18	*(-25.98)*	161.44	*(-70.81)*
Fine Particulate Matter (PM2.5) (pounds/day)	36.85	39.13	*(+2.28)*	31.83	*(-5.02)*	31.29	*(-13.70)*
Carbon Dioxide (CO_2) (pounds/day)	120,486	127,393	*(+6,907)*	105,056	*(-15,430)*	103,308	*(-42,844)*
Carbon Dioxide (CO_2) (metric tons/year)	21,858	23,121	*(+1,263)*	19,043	*(-2,816)*	18,729	*(-2,775)*

Source: Aspen Environmental Group 2010

Notes: Based on BAAQMD recommendations for compliance with the California Environmental Quality Act (CEQA), a significant impact would occur if an increase in operation-related emissions equal or exceed 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10. The recently-adopted guidelines also extend the thresholds to construction as well as operation-related emissions (BAAQMD 2010b).

Emission estimates are based on use of the CARB Urbemis2007 model (version 9.2.4).

Future stationary and area sources that are associated with the proposed uses in the alternatives would not cause substantial emissions.

Global Climate Change

Greenhouse gas emissions of the proposed alternatives would vary depending primarily on transportation demand and energy use. Levels of CO_2 emissions for the alternatives are shown in Table 22. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons of direct CO_2-equivalent GHG emissions per year. The alternatives would cause lower levels of GHG emissions than similar development in a non-urban or suburban setting, and the emission levels would likely be lower than what historically occurred with Presidio military activity in the CARB target date of 1990. For this analysis, cumulative contributions to global climate change caused by a development alternative are considered less than significant if the alternative would meet California's statutory targets and comply with strategies currently identified by the CARB and the CAT to comply with AB32 and Executive Order S-3-05.

California's GHG reduction strategies would be partially implemented by the Trust-required TDM program (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*) and air quality mitigation measures. For example, diesel construction equipment idling would be limited by Public Health Service Hospital (PHSH) SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*. Trust requirements for conserving energy through high-efficiency installations, meeting or surpassing current California Title 24 energy code requirements, and requiring LEED® (Leadership in Energy and Environmental Design) Silver ratings would also be consistent with CARB and CAT strategies for businesses and local governments. These measures would ensure water conservation and advance green building initiatives. Consistent with new Mitigation Measure NR-26 *Climate Friendly Parks Program*[41] *Participation*, the Trust would demonstrate "climate leadership" by developing a GHG emissions inventory, identifying strategies for reducing emissions through the development of an action plan, implementing the action plan within the Trust's environmental management systems (EMS), and educating park visitors about climate change and Trust efforts to address the issue. With these measures, none of the alternatives, including the mitigated preferred alternative, would generate GHG in quantities to cause a substantial impact related to global climate change or disrupt the CARB's progress on achieving the goals of AB32 and Executive Order S-3-05.

Alternative 1

The air quality impact of new uses within the Main Post on the Presidio and surrounding neighborhoods was analyzed on pages 252 through 260 of the final PTMP EIS. The rehabilitation and reuse of existing buildings and new construction expected under the PTMP would cause construction/demolition-related dust and exhaust from heavy equipment. Construction-related emissions would result from a variety of construction

[41] *The Climate Friendly Parks (CFP) program, a collaboration of the National Park Service (NPS) and the U.S. Environmental Protection Agency (EPA), provides national parks with management tools and resources to address climate change. The program aims to provide national parks with comprehensive support to address climate change both within park boundaries and the surrounding community. More information about the CFP program can be found at* www.nps.gov/climatefriendlyparks.

activities, including demolition, excavation, vehicle travel, and vehicle and equipment exhaust, but would be short-term in duration and localized. Because children in the Presidio Child Development Center in Building 387 would be sensitive to air quality impacts of the project, control measures would be warranted. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would be required to limit adverse effects on air quality during demolition and construction activities (PTMP EIS Mitigation Measures NR-20 *Basic Control Measures* and NR-22 *Deconstruction/Demolition Techniques*). Additionally, the final SEIS for the Public Health Service Hospital (PHSH) identified another measure to control construction equipment exhaust in a manner consistent with EPA recommendations (PHSH SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*). Alternative 1 would be required to implement the equipment exhaust measure along with the other measures for dust control.

Table 22 shows the emissions from motor vehicles and operation of minor stationary sources that would occur with the vehicle trips and occupation of rehabilitated and new buildings under this alternative. The PTMP EIS found that motor vehicle trips associated with PTMP development would cause emissions that would be significant in the regional context but the effects of the emissions would be adequately reduced by maintaining consistency with the regional Clean Air Plan. The Trust's TDM program, which consists of activities conducted by the Trust and by the park's tenants, would implement relevant transportation control measures of the CAP and the 2005 Ozone Strategy to reduce the number and length of vehicle trips and thus minimize air emissions and maintain consistency with the CAP (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*). Land uses would be coordinated to provide buffer zones and avoid conflicts from toxic contaminants or odors, which would also be consistent with the CAP. The anticipated traffic would not cause localized violations of ambient air quality standards for carbon monoxide at congested intersections.

Alternative 2

This alternative would not substantially increase vehicle emissions or emissions of other air pollutants when compared to the impact anticipated under Alternative 1 (the adopted management approach provided for in the PTMP) and would not generate significant nuisance dust or odors. The air quality impact of new uses within the Main Post on the Presidio and surrounding neighborhoods was analyzed on pages 252 through 260 of the final PTMP EIS. The alternative would involve demolition, construction, and other ground-disturbing activities that would cause short-term emissions of construction dust and equipment exhaust that would be greater than under Alternative 1 because more new construction would occur that involves greater amounts of soil excavation. Feasible BAAQMD-recommended control measures for fugitive dust particulate matter would be required to limit adverse effects on air quality during demolition and construction activities (PTMP EIS Mitigation Measures NR-20 *Basic Control Measures* and NR-22 *Deconstruction/Demolition Techniques* and PHSH SEIS Mitigation Measure NR-23 *Construction Equipment Exhaust Measures*).

The total emissions due to mobile sources and area sources related to this alternative are quantified in Table 22. Impacts on local and regional air quality from motor vehicle emissions and other operating-phase emissions would be similar to those identified for Alternative 1. In the PTMP EIS, motor vehicle trips associated with PTMP development were found to

cause emissions that would be significant in the regional context but the effects of the emissions would be adequately reduced by maintaining consistency with the regional Clean Air Plan. Although Alternative 2 would generate more traffic, the change in emissions from mobile and area sources over the emissions that would occur with Alternative 1 (net of Alternative 1 in Table 22) would not exceed the BAAQMD 54-pound-per-day thresholds. Compared to the emissions that would occur under Alternative 1, the operating-phase emissions from this alternative would not be significant in the regional context. The TDM program (PTMP EIS Mitigation Measure NR-21 *Transportation Control Measures*) would reduce these emissions and ensure that they occur in a manner consistent with the regional CAP. Land uses would be coordinated to provide buffer zones and avoid conflicts from high-volume roadways and other potential sources of toxic contaminants or odors, which would also be consistent with the CAP. The anticipated traffic would not cause localized violations of ambient air quality standards for carbon monoxide at congested intersections.

Alternative 3 (History Center)

This alternative would involve less new construction, traffic-related, and area source emissions than Alternative 1 and would not result in a significant air quality impact (a net reduction from Alternative 1 in Table 22). BAAQMD-recommended PM10 control measures and EPA recommendations for construction equipment exhaust emissions would be implemented during construction. Operational-phase emissions for this alternative are shown in Table 22. With the TDM program, regional emissions from motor vehicle trips would occur in a manner consistent with the CAP.

Alternative 4

Under this alternative, essentially no demolition or replacement construction would occur and the only sources of emissions would be similar to those that currently exist. Minor amounts of traffic-related and area source emissions would occur because existing buildings and activities would remain. Emissions that would be caused throughout the region by motor vehicle trips attributable to this alternative are shown in Table 22, and they would be less than what would occur under Alternative 1. Because emissions would be minor, this alternative would not adversely affect localized concentrations of any contaminant or disrupt air quality management plans within the region.

MITIGATION MEASURES

The following measures adapted from the final PTMP EIS (Mitigation Measures NR-20 through NR-22) and the final PHSH SEIS (Mitigation Measure NR-23) would eliminate the potential for significant air quality impacts.

NR-20 *Basic Control Measures* To reduce construction-generated particulate matter (PM10 and PM2.5) emissions, construction contractors will implement as appropriate the BAAQMD's recommended control measures for emissions of dust during construction. Basic control measures are as follows:

1. water all active construction areas at least twice daily
2. cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard

3. pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas

4. sweep when necessary (with water sweepers) all paved access roads, parking areas, and staging areas and

5. sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets

NR-21 *Transportation Control Measures (TCMs)* The Presidio Trust transportation demand management (TDM) program will implement the TCMs of the 2000 CAP and applicable TCMs of the 2010 CAP to minimize air emissions from Presidio-related activities. In addition, consistent with the 2000 CAP, the Trust will coordinate land uses to provide buffer zones and avoid conflicts from toxic contaminants or odors.

NR-22 *Deconstruction/Demolition Techniques* To the extent feasible, the Trust will apply an environmentally effective approach, including a combination of deconstruction and demolition techniques, to remove outdated structures and to reduce PM10 and PM2.5 emissions from demolition.

NR-23 *Construction Equipment Exhaust Measures* To reduce construction-related equipment exhaust of particulate matter and ozone precursors, construction contractors will implement the EPA's recommended measures for equipment emissions as follows. All construction equipment used at the construction site will:

1. not idle for more than ten minutes

2. not be altered to increase engine horsepower

3. include particulate traps, oxidation catalysts and other suitable control devices generally consistent with the most stringent of applicable federal or state emission standards and the best available emissions control technology (for example, Tier 4 engines will be available in the 2009 model year)

4. use ultra low sulfur diesel fuel with a sulfur content of 15 ppm or less

5. be tuned to the engine manufacturer's specifications in accordance with a defined maintenance schedule and

6. not be unnecessarily operated or staged near occupied residences, lodging, schools, or childcare facilities

The following measure would reduce GHG emissions, address the Presidio's (Area B) contribution to climate change, and assist the CARB in achieving the goals of AB32 and Executive Order S-3-05.

NR-26 *Climate Friendly Parks Program Participation (new)* Consistent with applicable law and subject to the availability of appropriate funding, the Trust will meet greenhouse gas (GHG) emissions reductions comparable to California's statutory requirements: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To accomplish this, the Trust will become a member of the Climate Friendly Parks Program to develop an inventory of park-based GHG emissions, identify and implement sustainable strategies to mitigate these emissions and adapt to climate change impacts, and educate the public about these efforts. The Trust will estimate emission and cost savings associated with such implementation actions as:

1. replacing boilers or furnaces with energy-efficient models

2. using biotic fuels (e.g., biodiesel) in generators and other stationary devices
3. installing energy-efficient lighting
4. producing or purchasing renewable electricity
5. reducing electricity and onsite fossil fuel consumption
6. reducing park vehicle and equipment fuel consumption
7. replacing park vehicles with fuel-efficient or alternative-fuel vehicles
8. reducing vehicle idling
9. increasing recycling, composting, and green procurement and
10. practicing reforestation and conservation forest management

The Trust will use environmental management systems (EMS) as the primary management approach for addressing these actions and for collecting, analyzing, and reporting information to measure performance in the implementation of this measure. The results of the park's emission inventory and the Trust's identified mitigation actions and associated emissions reductions will be summarized in a narrative document (Action Plan) intended for viewing by Presidio employees, visitors, and other interested parties.

REFERENCES

Bay Area Air Quality Management District (BAAQMD). 2007. *BAAQMD Toxic Air Contaminant Control Program*. Dated August.

BAAQMD. 2010a. *Bay Area 2010 Clean Air Plan*, Volume II . Dated September.

BAAQMD. 2010b. *BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines.* Adopted June.

California Air Pollution Control Officers Association (CAPCOA). 2008. *CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.* Dated January.

California Air Resources Board (CARB). 2007. *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. Dated October.

CARB. 2008. *Climate Change Proposed Scoping Plan*. Dated October.

California Environmental Protection Agency (CalEPA). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature.* Dated March.

Council on Environmental Quality (CEQ). 2010. *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions.* Dated February 18.

National Park Service. 2006. *Climate: People and Parks Respond to Change*. Sustainability News. Dated Fall.

3.5 Noise

AFFECTED ENVIRONMENT

To help the reader, the following description of noise terminology is provided as summarized from the final PTMP EIS. The A-weighted decibel scale (dBA) characterizes the pitch and loudness, as perceived by humans. The equivalent energy indicator, Leq, is an average of noise over a stated time period, usually one hour. The day-night average, Ldn, is a 24-hour average, which accounts for the greater sensitivity of most people to nighttime noise. The sound level that is exceeded ten percent of the time is known as L10. If the Leq is similar for two locations, a higher L10 indicates a wider fluctuation of noise levels and a lower L10 indicates steadier noise levels. Generally, a 3-dB difference in community noise is noticeable to most people, a 5-dB difference may cause a change in community reaction, and a difference of 10 dB is perceived as a doubling of loudness.

Noise Control Regulations and Programs

The Federal Highway Administration (FHWA) regulations (23 CFR 772) establish Noise Abatement Criteria (NAC), which aim to protect noise-sensitive land uses from highway noise. The FHWA procedures state that noise impacts from traffic are serious enough to warrant consideration of abatement when noise levels for a project approach or exceed the NAC or when they substantially exceed existing noise levels. The NAC are shown in Table 23.

The San Francisco Noise Ordinance[42] (Article 29 of the San Francisco Police Code) contains the local noise control regulations that apply to the urban neighborhoods surrounding the Presidio. The noise ordinance regulates construction noise, fixed-source noise, and unnecessary, excessive, or offensive noise disturbances within the city. Sections 2907 and 2908 of the San Francisco Police Code provide that:

- Construction noise is limited to 80 dBA at 100 feet from the equipment during daytime hours (7:00 AM to 8:00 PM). Impact tools are exempt provided that they are equipped with intake and exhaust mufflers.
- Nighttime construction (8:00 PM to 7:00 AM) that would increase ambient noise levels by 5 dBA or more is prohibited unless a permit is granted by the Director of Public Works.

To protect all new or rehabilitated multi-family dwelling units (including hotel guest rooms, apartments, and other attached dwellings) from unacceptable exterior noise environments, the Trust enforces noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) with building permit conditions. Single-family homes are not subject to Title 24 standards.

[42] *The San Francisco Noise Ordinance can be viewed at* http://www.municode.com/content/4201/14140/HTML/ch029.html.

23 FHWA NOISE ABATEMENT CRITERIA (HOURLY DBA)

	Activity Category	*Leq(h)*	*L10(h)*
A	Lands on which serenity and quiet are of extraordinary significance and serve as important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose	57 (Exterior)	60 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals	67 (Exterior)	70 (Exterior)
C	Developed lands, properties, or activities not included in Categories A or B above	72 (Exterior)	75 (Exterior)
D	Undeveloped lands	None Applicable	None Applicable
E	Residences, motels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums	52 (Interior)	55 (Interior)

Source: 23 Code of Federal Regulations, Part 772, Table 1
Notes: dBA = A-weighted decibel scale
Leq(h) = equivalent energy indicator; average noise over one hour
L10(h) = sound level exceeded 10 percent of the time over one hour

Existing Noise Conditions

The existing noise environment of the Main Post district is characterized by traffic, most notably on U.S. Highway 101 (Doyle Drive), where traffic noise levels are commonly above 67 dBA, the FHWA Noise Abatement Criterion that applies to recreation areas, parks, residences, hotels, and schools. Additionally, noise levels above 67 dBA can occasionally occur adjacent to some of the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard) and near Presidio entry gates (Lombard and Presidio gates). As with other areas of the Presidio away from primary roadways, the remainder of the Main Post is generally quieter than the surrounding urban environment of San Francisco because there is less urban activity (and density). Within the Main Post district, noise levels in areas more than 200 feet from Doyle Drive and areas not immediately adjacent to other internal roadways are below the 67-dBA NAC threshold.

Existing daytime noise levels in the Main Post district range from approximately 60 to 72 dBA hourly Leq, depending on the receptor's proximity to traffic. Immediately adjacent to Doyle Drive (Building 106), the exterior noise levels are about 72 dBA Leq due to steady highway traffic. Levels above 67 dBA Leq occur within about 200 feet of Doyle Drive (Environmental Sciences Associates 2004). Along Presidio Boulevard, west of Lombard Street, noise fluctuates around 68 dBA Leq

depending on variable traffic, including urban buses. At the Officers' Club (Building 50), daytime noise is lower at about 60 dBA Leq. On a day-night basis, noise at the edge of Doyle Drive is above 70 Ldn, and day-night levels are between 60 and 65 Ldn along the roads of the perimeter of the Main Post including Presidio Boulevard, Moraga Avenue, Montgomery Street, and Lincoln Boulevard (CCSF 2007). The results of a monitoring program for daytime noise levels conducted in 1999 and 2001 are summarized in Table 24. These levels are representative of current conditions because the types of noise sources in the Main Post have remained virtually unchanged since the PTMP was prepared.

Noise-Sensitive Areas

Examples of noise-sensitive uses include lodging, residences, schools, day care centers, and recreational uses of noise-sensitive areas (such as San Francisco National Cemetery) or areas where natural sounds are of significance (such as Crissy Field marsh). Existing noise-sensitive areas at the Main Post include:

- Presidio Child Development Center (Building 387);
- Bay School of San Francisco (Building 35), an independent high school;
- residences on Riley Avenue, Funston Avenue, and Infantry Terrace; and
- Tennessee Hollow.

24 SUMMARY OF SHORT-TERM NOISE MEASUREMENTS

Site	*Description*	*Dominating Noise Source*	*Hourly Leq (dBA)*	*L10 (dBA)*
R3	Presidio Boulevard at Building 545	Buses Accelerating	67.9	69.1
R14	Doyle Drive at Building 106	Doyle Drive/Highway 101	72.1	73.8
R15	Moraga Avenue at Building 50	Main Post Activity	59.9	64.0

Source: Aspen Environmental Group 2001
Notes: dBA = A-weighted decibel scale
Leq(h) = equivalent energy indicator; average noise over one hour
L10(h) = sound level exceeded 10 percent of the time over one hour
L10 = sound level exceeded 10 percent of the time
FHWA = Federal Highway Administration
Either Leq or L10 (but not both) may be used on a project.

The nearest noise-sensitive areas within the City and County of San Francisco are residences over 1,500 feet east of the Main Post near the Lombard Gate on Lyon Street.

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts from noise. The analysis of the potential impacts of demolition or construction noise relies on a comparison of the anticipated effects of each alternative with the limitations of the San Francisco Noise Ordinance. Presidio tenants, recreational users, and certain residences could experience significant impacts if the physical constraints of a particular construction/demolition site preclude provision of suitable buffer distance.

The analysis of traffic noise impacts relies on a comparison of observed and modeled noise levels at locations where substantial traffic changes are expected to be induced by an alternative. For roadways internal to the Presidio and near noise-sensitive areas, traffic volumes that would occur under each alternative were compared to determine if the alternative would cause a noticeable noise increase. Significance of impacts depends on the existing conditions. At some locations throughout the Presidio, existing noise conditions are known to approach or exceed the FHWA Noise Abatement Criteria. For these locations, a noticeable (greater than 3-dBA) noise increase caused by an alternative would warrant new mitigation for traffic noise. To protect new development from unacceptable exterior noise environments, new multi-family residential units (lodging, apartments, or other attached dwellings) within the Presidio would be constructed according to standards equivalent to Title 24 of the California Code of Regulations. If this practice would not be sufficient to protect new noise-sensitive areas from traffic noise, additional mitigation is identified.

Alternative 1

The impact of noise from general construction/demolition, increased traffic, special events, and other activities within the Main Post and in surrounding neighborhoods was analyzed on pages 260 through 268 of the final PTMP EIS. Development under this alternative would cause construction/demolition noise and increased traffic noise on the Main Post.

Construction Equipment Noise Construction/demolition noise could at times be distinctive and disruptive to park users and other people within close proximity of the activity. The types of construction equipment to be used would typically generate noise levels of 70 to 80 dBA at a distance of 100 feet while the equipment is operating. Construction equipment operations would vary from intermittent to fairly continuous, with multiple pieces of equipment operating concurrently. Such noise levels, however, would not be continuous throughout the day and would be restricted to daytime hours. During construction, contractors and other equipment operators would need to comply with the San Francisco Noise Ordinance, which prescribes working times, types of construction equipment to be used, and permissible noise emissions. Trust-enforced noise standards would be applied to minimize noise disturbance in the vicinity of construction/demolition activity (PTMP EIS Mitigation Measure NR-23 *General Construction/Demolition Noise*).

Traffic Noise Traffic volumes generated by this alternative would increase ambient noise above existing levels but not to levels that would be noticeably different from what is shown in the final PTMP EIS. Locations where existing noise conditions are known to approach or exceed the FHWA Noise Abatement Criteria would continue to experience adverse traffic noise. Existing noise-sensitive uses would experience increased noise from traffic internal to the Presidio. Although traffic volumes would increase noise above background levels, the increase would not be substantial (i.e., would not exceed applicable standards) for most locations and would not warrant mitigation. However, traffic generated by this alternative would be noticeable at the Riley Avenue housing. Trust-enforced traffic noise reduction measures and noise monitoring (PTMP EIS Mitigation Measures NR-24 *Traffic Noise Reduction* and NR-25 *Traffic Noise Monitoring and Attenuation*) would be enforced to reduce noise. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

Development of visitor-oriented and open space uses (such as the Main Parade) would not introduce new noise-sensitive uses to the areas of the Main Post district that are above the 67-dBA NAC threshold. Use of typical building materials for the Presidio Theatre and other cultural/educational uses would ensure that tenants and visitors to the buildings are insulated from outdoor noise because interior noise levels would be at least 15 dBA below exterior levels.

Alternative 2

This alternative would not expose persons to or generate noise levels in excess of applicable standards. Development under Alternative 2 would cause construction/demolition noise and increased traffic noise on the Main Post.

Construction Equipment Noise Construction would result in increased noise levels from earthmoving and construction/demolition activities. General construction/demolition would disrupt Presidio tenants at noise-sensitive uses and recreational users similar to what is anticipated under Alternative 1. Construction for the Presidio Theatre would occur at least 400 feet from the nearest noise-sensitive residential areas along Riley Avenue or Infantry Terrace. The residences along Riley Avenue would be buffered from construction activities by the Montgomery Street Barracks and currently experience relatively high noise levels (i.e., commonly above 67 dBA) from Doyle Drive traffic, which would tend to mask construction noise. The noise-sensitive Presidio Child Development Center (Building 387) would also experience increased disruption from theatre construction and from demolition of the adjacent Herbst International Exhibition Hall (Building 385). As anticipated under the PTMP, tenants of Building 387 and Infantry Terrace residences could experience significant noise impacts because of construction/demolition activity being within 250 feet. During construction, contractors and other equipment operators would need to comply with the San Francisco Noise Ordinance, which prescribes working times, types of construction equipment to be used, and permissible noise emissions. Trust-enforced noise standards would be applied to minimize noise disturbance in the vicinity of construction/demolition activity (PTMP EIS Mitigation Measure NR-23 *General Construction/Demolition Noise*).

Traffic Noise Traffic noise increases are evaluated by considering whether they would cause noise to approach or exceed the NAC in Table 23. Operation and occupation of uses within the Main Post would cause

increased traffic noise, but would not result in unnecessary, excessive, or offensive noise. Although residences along Riley Avenue and locations along some of the primary internal roadways of the Presidio currently experience noise levels that exceed the FHWA NAC of 67 dBA, traffic noise under this alternative would not cause a noticeable change (greater than 3 dBA) when compared to the traffic noise that would occur under Alternative 1. Similarly, noise from traffic at the Lombard, Presidio, and Arguello Gates under this alternative would not notably increase above the traffic noise levels shown in Alternative 1, which are levels common and accepted in the urban areas surrounding the Presidio. Roadways that lead to and from the Main Post district would experience increased traffic, but new mitigation would not be warranted beyond what is identified in the final PTMP EIS. Trust-enforced traffic noise reduction measures and noise monitoring (PTMP EIS Mitigation Measures NR-24 *Traffic Noise Reduction* and NR-25 *Traffic Noise Monitoring and Attenuation*) would be enforced to reduce noise. The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels.

This alternative would introduce a new lodge, theatre, and other cultural/educational uses that would be sensitive to traffic noise. These uses would not be exposed to excessive noise from Doyle Drive, which is the major ambient source of noise for the Main Post, because each would be more than 200 feet away from the highway. The PTMP recognized that new uses in the Main Post district could occasionally be exposed to outdoor ambient noise levels above the 67-dBA NAC where immediately adjacent to the primary internal roadways of the Presidio (Presidio Boulevard and Lincoln Boulevard). The current practice of enforcing noise insulation requirements would provide acceptable interior noise levels for the lodge, and use of standard building materials for the theatre and cultural/educational uses would ensure that tenants and visitors to these buildings would be insulated from outdoor noise because interior noise levels would be at least 15 dBA below exterior levels.

Noise from Stationary Sources or Special Events Special events that would be held periodically at the Main Post could temporarily increase ambient noise levels. Similar to what is anticipated under the PTMP, because no major stationary noise sources or major sound amplification systems would be used in the district, no substantial noise effects would occur. The Trust would impose limitations on the equipment used and the time and area for outdoor events to ensure that noise does not unreasonably disturb visitors or tenants.

Alternative 3

Under this alternative, construction/demolition noise would cause less disruption than what is anticipated under Alternative 1 because new construction would be limited to the History Center. Construction/demolition for the History Center would occur at least 400 feet from the nearest noise-sensitive residential areas along Riley Avenue or Infantry Terrace. Ambient noise increases associated with traffic due to operation and occupation of the uses under this alternative, and the effects of traffic noise on the proposed uses and the History Center, would be less than under Alternative 1 due to fewer vehicle trips under this alternative.

Alternative 4

Under this alternative, construction/demolition noise would cause less disruption than what is anticipated under Alternative 1 because new construction would be limited to only those projects underway. Ambient noise increases associated with traffic due to operation and occupation of

proposed uses under this alternative, and the effects of traffic noise, would be less than under Alternative 1 due to fewer vehicle trips under this alternative.

MITIGATION MEASURES

The following measures adapted from the final PTMP EIS would protect Presidio residents, visitors, and wildlife from construction, traffic, and special events noise.

NR-8 *Natural Sounds* Special events or other activities that could disturb nesting birds at sensitive use areas will be seasonally restricted.

NR-23 *General Construction/Demolition Noise* Construction contractors and other equipment operators will comply with Trust-enforced noise criteria, standards and levels set forth in the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code) to minimize noise disturbance in the vicinity of project sites during the construction process.

NR-24 *Traffic Noise Reduction* Vehicle traffic throughout the Presidio represents the major source of existing and future noise, especially from U.S. Highways 101 and 1. Although the Trust cannot control the level of noise produced by privately owned vehicles, it can control which types of transit vehicles are used for park purposes at the Presidio. The Trust will use and encourage city agencies and transit providers to select transit vehicles that produce less noise pollution. Energy-conserving government vehicles will be used by maintenance and other divisions. If possible, electric or other alternative vehicles will be used to reduce noise levels.

NR-25 *Traffic Noise Monitoring and Attenuation* The San Francisco National Cemetery, Crissy Field marsh, and Tennessee Hollow have been identified as areas important to natural soundscapes, both for recreation and wildlife, and will be monitored during construction or other activities that could be detrimental to this value. Noise attenuation measures will be instituted, if feasible, if noise levels exceed the Noise Abatement Criteria standards. Examples of attenuation measures include sound barriers or berms, vehicle restrictions, and traffic calming.

REFERENCES

Aspen Environmental Group. 2001. *Short-Term Ambient Noise Measurements*.

City and County of San Francisco (CCSF), San Francisco Department of Public Health. 2007. *Traffic Noise Model for Transportation Noise Maps*.

Environmental Science Associates. 2004. *Draft Noise and Vibration Study, South Access to the Golden Gate Bridge*. Dated September.

3.6 Historic Resources

The history and the significant buildings, structures, and landscapes of the Presidio are described on pages 68 to 76 of the final PTMP EIS. Both this description and the 1993 National Historic Landmark (NHL) documentation (1993 NHL update) are incorporated here by reference. The Trust initiated an update to the NHL documentation in 2008. Research and analysis for the update was conducted in 2008 (2008 NHL update) and submitted to the National Park Service (NPS) for review that year. Pending NPS review schedules, the update is anticipated to be finalized in 2010. Portions of the final PTMP EIS descriptions of the historic resources along with the revisions to historic significance that are anticipated from the 2008 NHL update are summarized below. Historic resources within the Area of Potential Effects are identified in Figure 15.

AFFECTED ENVIRONMENT

National Historic Landmark District

The Presidio was designated as a National Historic Landmark (landmark) in 1962 with minimal documentation but with recommendations for further work on identification. The National Historic Landmarks Advisory Board indicated at that time that the boundary of the NHLD should be the entire Presidio of San Francisco military reservation. The Commanding General of the Sixth Army and the NPS agreed in 1970 that the entire military reservation was within the NHLD boundary.[43] A comprehensive update of the NHL documentation with identification of contributing resources was not completed until 1993. Based on the National Register of Historic Places 50-year minimum age "rule of thumb"[44] for considering contributing resources, the 1993 update identified 1776 through 1945 as the period of significance for the Presidio.

Basis for NHL Designation

The Presidio was designated as a National Historic Landmark because it was considered to possess national significance under both the National Historic Landmark Criteria (Henry, ed. 1999) and the National Register of Historic Places Criteria (Shrimpton, ed. 1997). Both the National Historic Landmark Criteria and the National Register Criteria identify themes under which a property might be considered for eligibility, such as association with important events, association with lives of important persons, embodiment of distinguishing architectural characteristics, and

[43] *Page 7-6 of the 1993 NHL update describes the history of listing the Presidio as a NHLD.*

[44] *"Properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within" categories further defined in the National Register Bulletin 15 (Shrimpton, ed. 1997).*

Source: Presidio Trust 2010

the potential to yield information important in prehistory or history. The 1993 NHL update states the following with regard to the significance of the Presidio:

> *The Presidio of San Francisco possesses national significance under combined National Historic Landmark Criteria 1, 4, 5, and 6. The property is composed of a wealth of historic, architectural and archeological resources that collectively comprise a distinctive entity of exceptional historical significance (Criteria 4, 5, and 6), and whose archeological study can amplify our understanding of those periods and peoples underrepresented in the existing historical record. As a vast district entity, the Presidio possesses exceptional value in illustrating the history of the United States through its association with important historical events and its outstanding representation of patterns of national development through multiple periods (Criterion 1).*[45]

2008 NHL Update

The 1993 NHL update used in the final PTMP EIS to identify historic resources is now more than 15 years old. The implementing regulations for Section 106 of the NHPA state that "The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible" for the National Register of Historic Places.[46] No aspect of the Cold War era was 50 years old when the 1993 update was completed. However, the update states, "At a point in the future when there exists greater perspective from which to evaluate the significance of the Presidio after World War II, an extension of the district's period of significance through the 1950s and beyond should be considered." In recent years, there has been a considerable amount of study, undertaken primarily by the Department of Defense, on the significance and possible National Register eligibility of Cold War-era installations. The Cold War era (1945 through 1989) is a focus of the 2008 NHL update since it is the last epoch in the history of the U.S. Army at the Presidio before the announcement of the Base Closure and Realignment Act in 1989 that the U.S. Army no longer needed the Presidio.

Although still in draft form, the 2008 NHL update has found that activities in the Presidio during the Cold War may have National Register significance.[47] However, only a few of the structures built

[45] *Pages 8-7 though 8-8 of the 1993 update describe the historical significance of the Presidio and list the themes and eras of history under which the Presidio is considered to be of national significance.*

[46] *36 CFR 800.4(c)(1), Application of the National Register Criteria. According to 36 CFR 60.4, the National Register Criteria include "the quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and (a) that are associated with events that have made a significant contribution to the broad patterns of our history; (b) that are associated with the lives of persons significant in our past;(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; (d) that have yielded, or may be likely to yield, information important in prehistory or history."*

[47] *To qualify for the National Register, a property must be significant; that is, it must represent a significant part of the history, architecture, archaeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past (Shrimpton, ed. 1997).*

(continued)

(continued)

during that time would actually qualify for listing in either the National Register or in the NHLD. Buildings that housed the Sixth Army's command during the Cold War would be eligible for the National Register of Historic Places. However, all of these older buildings are already listed as contributing structures in the NHLD. The majority of the structures constructed during the Cold War era were part of nationwide construction efforts such as the Capehart and Wherry housing programs.[48] The majority of the structures built in the Presidio during the Cold War were constructed from standard plans and are not unique to the Presidio. Evaluating these structures in the context of other U.S. Army facilities indicates that, with one exception, there are better or equal examples of these buildings already listed in the National Register. At the Main Post, the Presidio Library (Building 386) appears to represent a unique building type for the Cold War period and has been determined eligible for the National Register (Sucre, et al. 2008). Despite the medical research that occurred at Letterman Hospital during that period,[49] the Presidio does not contain structures that represent the scientific and technological advance that has been the major justification for listing Cold War era sites on the National Register.

Properties that have achieved significance within the past 50 years may be listed in the National Register of Historic Places, according to the National Register Criteria for Evaluation, only if they are of "exceptional importance," or if they are integral parts of districts that are eligible for listing in the National Register. This principle safeguards against listing properties that are of only contemporary, faddish value and ensures that the National Register is a register of historic places (Sherfy, et. al. 1990).

[48] In 67 FR 39,332, dated June 7, 2002, the Advisory Council on Historic Preservation (ACHP) issued a Program Comment approving the Army's management of Capehart and Wherry Era family housing and associated structures and landscape features. The Program Comment states, "The Army considers its inventory of Capehart and Wherry Era properties, including any associated structures and landscape features, to be eligible for the National Register of Historic Places for the purposes of Section 106 compliance" (ACHP 2002). The 2008 NHLD update will take this Program Comment into consideration when evaluating the eligibility of Capehart and Wherry properties in the Presidio of San Francisco.

Changes in Existing NHLD Resources Following the 1993 NHL update, the NPS demolished 37 historic buildings: 32 to undertake the Crissy Field rehabilitation and five to remove hazardous materials. Five additional historic structures were demolished by the Trust. One was removed after significant damage from fire and another after being damaged by heavy equipment. Two historic tennis courts were removed for construction of the Letterman Digital Arts Center. The fifth structure to be demolished by the Trust was the Fort Scott War Department Theater (Building 1387) after it collapsed in 2003 due to structural deficiencies that resulted from its conversion by the U.S. Army to a bowling alley. In recent years, changes in the condition of the Presidio's historic building stock have been primarily related to stabilization, preservation, and rehabilitation projects of varying scale and scope.

Main Post Construction History and Resources, 1776-1945

The Main Post is the one district in the Presidio that represents the entire NHLD period of significance of 1776 through 1945. It also includes buildings associated with the Cold War era of base activity. It contains

[49] The Letterman Army Institute of Research carried out primary research in medicine, optics, nutrition, and toxicology (Thompson 1997).

the remains of the original Spanish structures from the 18th century as well as buildings that housed the Sixth Army Command during the Cold War era.

The Cultural Landscape Assessment (CLA) for the Main Post (SMWM, et al. 2002) describes the changes in the area that occurred through nine major epochs of history (expanded from the eight described in the 1993 update). The CLA also studied a tenth epoch that includes the Cold War through base closure in 1994. Each successive layer of history expanded upon or erased the evidence of earlier periods of development. The CLA identifies the remaining elements of each period within the context of the physical framework of the Main Post as it can be seen today. The CLA's treatment recommendations suggest methods for clarifying significant features in the landscape that have eroded over time (such as the Main Parade and El Presidio), including new infill construction and building removal. In the final analysis, the Main Post is significant and contributes to the NHLD for the sum of its history as it existed through 1945 (the last year of the period of significance) rather than for any individual epoch of development. A description of each of the epochs of history detailed in the CLA follows, along with a summary of changes to historic resources since 1994.

Spanish Occupation, 1776-1792 The small, early Spanish Presidio, El Presidio, marked the northern frontier of Spanish Colonial America. It represents the first European settlement site within San Francisco. While as an archaeological resource the site qualifies as a contributing element of the NHLD, there is little to no evidence of this resource above grade. Moraga Avenue and portions of the Officers' Club (Building 50) are the only remaining above-ground elements that mark the location of the early El Presidio.

Spanish/Mexican Occupation, 1792-1845 By 1812, El Presidio was greatly enlarged with improvements that indicate that the colony intentionally took on a more permanent character after 1792. The enlargement was the first construction effort in the Main Post that permanently changed its appearance by greatly altering or removing prior structures. In 1821, when Mexico declared independence from Spain, the Presidio became a Mexican colony. As with the early Spanish Presidio, the archaeological site from this period clearly contributes to the significance of the Main Post and to the NHLD. Above grade, however, the site is expressed only in the remains of the Officers' Club along with the locations of Moraga Avenue, Mesa Street, and Graham Street. It is important to note that almost all later development in the Main Post is based on the grid that was created by the quadrangle of the 1812 El Presidio.

Early U.S. Occupation, 1846-1860 John C. Fremont, commander for American forces in California, took possession of the Presidio in 1846, officially claiming California for the United States. Few improvements were made to the Presidio during this time, although effort was expended to fortify the harbor entry. A parade ground (First Parade) was established in El Presidio plaza, therein setting the pattern for future development of the Main Post. Little evidence of the early United States occupation remains beyond the Officers' Club and the locations of Moraga Avenue, Mesa Street, and Graham Street.

Civil War Expansion, 1861-1870 With the discovery of gold in 1849 and the growing unrest between the northern and southern states, the Presidio was subject to a major expansion to secure California and the gold shipments for the Union states. For the second time in its history, major expansion overwrote previous eras of development and altered the appearance of the Main Post. The First Parade, which marked the 1812

El Presidio, was extended to what is now Lincoln Avenue. One side of this new enlarged parade ground (Old Parade) was lined with officer housing and the other with enlisted barracks. The basic boundaries of the Civil War-era expanded post remain in the street patterns, despite the removal of the buildings on the west side of the Old Parade in the 1950s. However, the spatial definition of the eastern edge of the Old Parade was diminished with the addition of Buildings 35, 38, and 39 in the early to mid-twentieth century.

Division Headquarters, 1871-1890 After the Civil War, the U.S. Army began a conscious development program to transform the Presidio from a frontier post to a more imposing military presence. Concurrently, in an effort to retain the Presidio and mark its boundaries, the U.S. Army began a major forestation program starting with the lands surrounding the Main Post. Changes in the Presidio reflected national trends from both the City Beautiful and parks movements. Working predominantly with wood construction and ornamental plant materials, the U.S. Army transformed the Presidio to a more garden-like site with a grand entry along Lombard Street and with alleys of trees and hedges lining the major streets. While the garden-like environment has changed with the loss of plant materials, strong visual evidence of the development of this period survives in the Funston Avenue houses, the mature Presidio forest, and the remains of the Alameda entry and walkway (SMWM, et al. 2002).

A Grand Post, 1891-1908 The outbreak of the Spanish-American War in 1898 and the consolidation of small frontier military outposts transformed the Presidio into a nationally prominent military base. The role of the Presidio as the command in the Pacific Theater was solidified and a major construction and expansion program supplanted wood-frame construction with masonry, thereby creating the north and west edges of the drill field now known as the Main Parade. This third major overlay of construction in the Main Post was more a program of expansion than a change to the previous layers of development. Building 42, a Bachelor Officers Quarters (BOQ) later named Pershing Hall, replaced an earlier wood structure that had burned in 1899. The Montgomery Street district remains largely intact. The central open space from this era (the Main Parade) survives as a parking lot. The buildings along both sides of Anza Street that had formed the eastern edge of the Main Parade (with the exception of Buildings 86/87) were demolished beginning in the 1950s.

World War I, 1909-1920 As a command for the U.S. Army in the Pacific, the Presidio had a significant role during World War I. The construction program of masonry buildings begun at the end of the 19th century was continued with the completion of officer housing on Infantry Terrace and two more barracks along Montgomery Street. The Infantry Terrace housing introduced the Mission Revival style into the Main Post and created an architectural theme that was continued until the Cold War. Reflecting another influence of this period – the Panama Pacific Exposition – a large three-story barracks (Building 35) was constructed in the neo-classical style at the north end of the Old Parade, beginning the gradual encroachment of new construction into the parade space. During this period of time the land bounded by Moraga Avenue, Graham Street, Arguello Boulevard, and Sheridan Avenue was set aside as a plaza to honor General Pershing after a house fire in this area killed his wife and three daughters; his son survived. Today Pershing Square remains as an open park that has been overlaid with a system of non-historic concrete walkways and plazas that were constructed in the 1950s

and 1960s. The post flagpole was moved to this location in the 1950s. Infantry Terrace, the Halleck Street building cluster, and the Main Post street system all survive as intact elements of the 1909-1920 period.

Peacetime Activity, 1921-1940 After World War I, activity at the Presidio was reduced. The standing U.S. Army was made smaller and its divisions reorganized. The post remained an active training ground, but the role of the post as a major command began to diminish. Works Progress Administration (WPA) funding and the Federal Highways Act greatly transformed the Presidio, in particular the Main Post. WPA construction included the Presidio Theatre (Building 99), two new barracks (Buildings 38 and 39), and the School for Bakers and Cooks (Building 220) as well as a "restoration" of the Officers' Club that actually remodeled the wooden structure with stucco to make it look more Spanish in origin. The new barracks structures, located within the Old Parade, permanently altered the primary open space around which the Main Post had been organized for 160 years (SMWM, et al. 2002). Building 39 also eliminated what had been the post's formal entry at the end of Presidio Boulevard (the Alameda), thus changing a major circulation pattern and the experience of a grand entry to the Main Post from the east. The buildings constructed during this time remain in excellent condition and mark a strong WPA influence on the Main Post.

In 1937, the Federal Highways Act triggered the construction of Doyle Drive as the east-west connector from the city to the Golden Gate Bridge, dividing the Main Post from Crissy Field and the waterfront and greatly transforming the Presidio. Doyle Drive construction included the introduction of two major viaduct structures into the Presidio's landscape and the relocation or demolition of several buildings along the highway corridor. At the Main Post, the project severed street and railroad connections and removed several buildings at the north end of Halleck Street that had been the quartermaster depot.

World War II, 1941-1945 In the first years of World War II, the Presidio again took on the role as an Army command for the Pacific Theater. A general fear that San Francisco would be the next target after Pearl Harbor prompted the designation and related build-up of personnel and support facilities. The command was located in Building 35, which had been converted from barracks to offices. The first years of the war saw a major construction effort of "temporary" wood-frame buildings that were built from standard plans. On the Main Post, three barracks (Buildings 3, 40, and 41) and a recreation hall (Building 37) were built in this style, along with the Spanish Colonial Revival-style Red Cross building (97). By 1941, the First Parade, formerly El Presidio plaza, had become a paved parking lot with two of the new temporary barracks located on its eastern edge. The overlay of new construction from this and previous eras at the Old Parade and El Presidio plaza significantly changed the open appearance of this area. The Presidio's status as a headquarters for the Pacific theater of operations was terminated in 1943 following the Battle of Midway, but the post continued to conduct support operations for the war effort. The majority of World War II construction on the Main Post remains.

Main Post Construction History and Resources, 1945-Present

The 2008 NHL update necessitated the evaluation of eras of history that were not previously considered as contributing to the significance of the NHLD, and a description of changes or treatments to historic resources in the Presidio (including the Main Post) that have occurred since the 1993 update. A summary of this information is provided below.

Cold War Era, 1945-1989 Studies prepared primarily by the U.S. Department of Defense identify the Cold War era as extending from 1945 (the end of World War II) through 1989 (the fall of the Berlin Wall). The Presidio was at the heart of the U.S. Army's operations in California and the West Coast from the early 1850s through World War I. The Presidio began to lose its preeminence during the inter-war era, but it nonetheless remained an active post through the majority of World War II. During much of the Cold War, it was the administrative command for the Sixth Army and home to various specialized functions. The Sixth Army included 30 U.S. Army installations in eight western states (Thompson 1997). Its key facilities were at Fort Ord, Fort Irwin, and Fort Lewis. While the Presidio served as administrative command, the majority of functional work occurred at other bases. The 1973 ceasefire in Vietnam saw the Sixth Army relieved of all administrative responsibilities other than those associated with Army Reserve and National Guard units. These final functions remained essentially unchanged between 1973 and the transfer of the Presidio from the U.S. Army in 1994.

During the Cold War era, Letterman Hospital was one of the largest and most active modern hospitals in the military, and Fort Winfield Scott remained a command for coastal defenses. The hospital and coastal defense units were under separate commands and were largely independent of each other as well as of the Sixth Army. Fort Scott commanded the San Francisco Bay Area deployment of short-range anti-aircraft missiles, one of two such deployments in the state of California. The Presidio's only Nike installation, Battery Caulfield, was inactivated before 1972. The remaining Bay Area Nike sites were inactivated by 1974, at which time the functions housed at Fort Scott were reduced in scope and responsibility. With the ceasefire in Vietnam, the Letterman command was greatly reduced.

This last period of U.S. Army development significantly changed the appearance of the Main Post through a program of construction, demolition, and alteration of both buildings and landscaped areas. Six of the eight Civil War barracks lining the west side of Graham Street were demolished, the Main Parade was paved, and several of the Montgomery Street Barracks were converted to office use. The landscape of Pershing Square was also modified during this period, resulting in its appearance today.

Eight new buildings were constructed in the Main Post during this period: a gym (Building 63), a bowling center (Building 93), the enlisted club (Building 135), a cafeteria (Building 211), a communications center (Building 34), the post exchange (Building 385), the library (Building 386), and the child care center (Building 387). The bowling center, the last building to be constructed during this period, was built in 1989. Various garages and support buildings were also constructed during this time; some of these structures (such as the carports along Mesa Street) have since been removed. The Officers' Club was also greatly modified in the 1970s by a major addition on the south side of the building. The only buildings on the Main Post constructed during the Cold War era that are eligible for the National Register are the library (Building 386) and Golden Gate Club (Building 135). Pending finalization of the 2008 NHL update, all other construction that occurred

on the Main Post during this time has been found not to qualify for Register listing.[50]

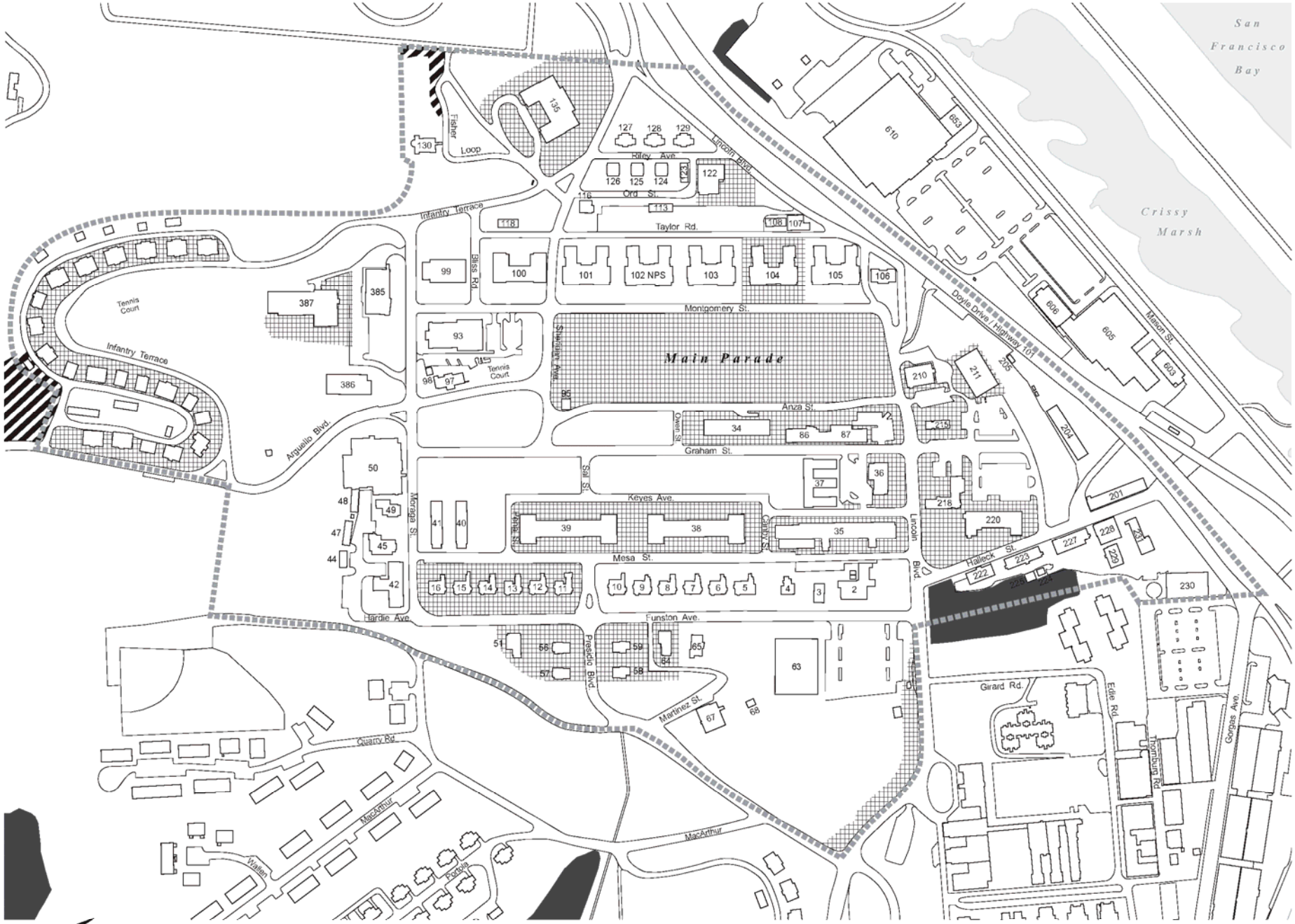
Post to Park, 1994-Present Since transfer from the U.S. Army in 1994, management of the Presidio, first by the NPS and then by the Trust, has resulted in preservation and rehabilitation projects that have greatly improved the condition of historic resources in the Presidio. The efforts have ranged in scope from upgrade of existing landscape features to projects that have completely changed the appearance of some sections of the Presidio.

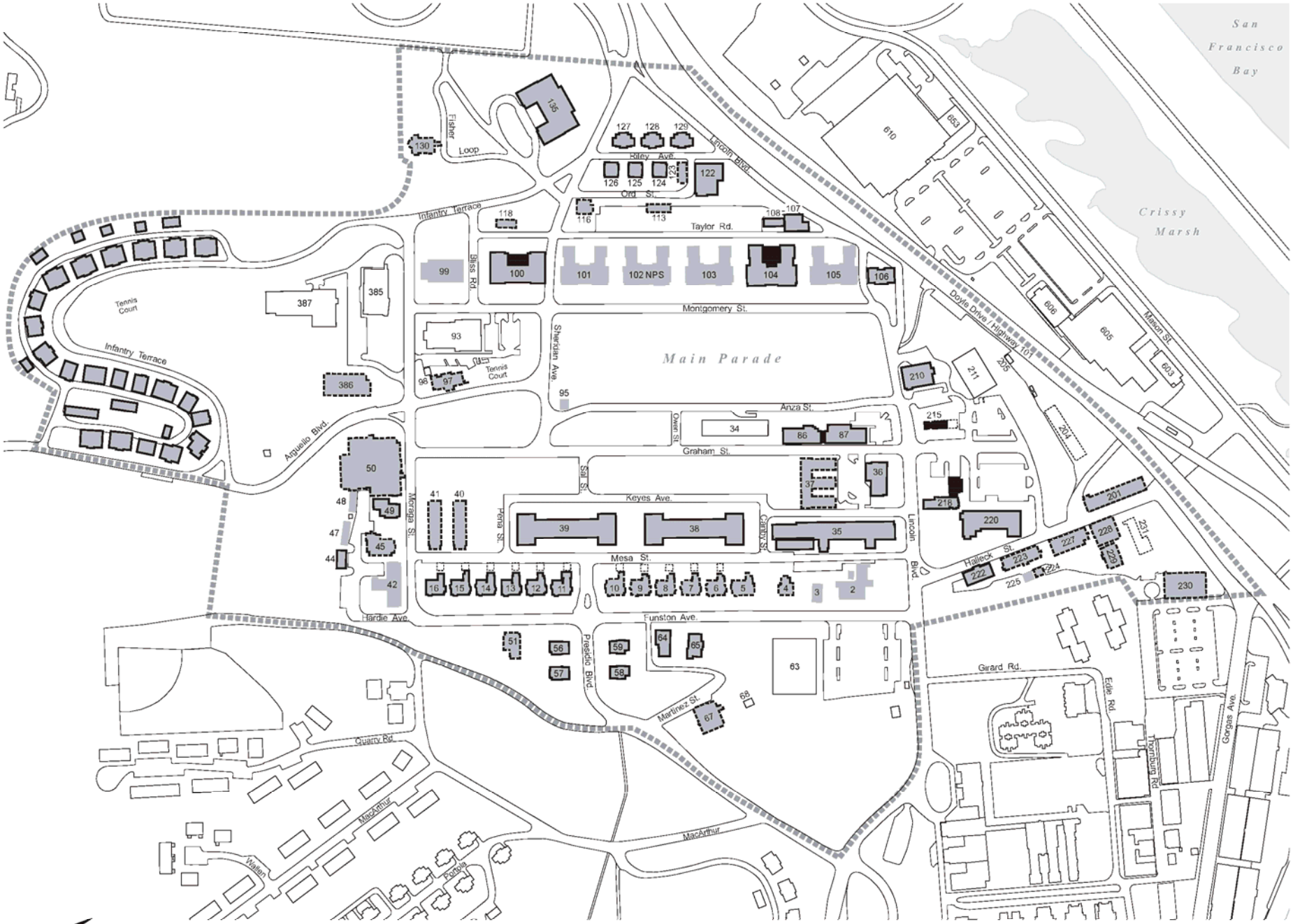
Thousands of hours of volunteer work managed jointly by the Golden Gate National Parks Conservancy, the NPS, and the Trust have restored many acres of natural resource habitat. A multi-million dollar environmental remediation program that the Trust assumed from the U.S. Army has also allowed for restoration of both native plant habitats and cultural landscapes, including restoration of a 400-foot segment of the Tennessee Hollow creek system at former Fill Site 6A. Fourteen acres of the Presidio's historic forest have been replanted by the Trust and 13 major cultural landscapes throughout Area B of the Presidio have also been rehabilitated. A cooperative effort among the agencies to implement the Presidio Trails and Bikeways Master Plan has resulted in major improvements in trails and, perhaps most visibly, the creation of overlooks at Inspiration Point, at Immigration Point, above Crissy Field, and above the National Cemetery. Ultimately, there will be 24 miles of trails and eight new scenic overlooks (Figure 16).

The Trust has rehabilitated more than 300 of the 433 historic buildings in Area B. Many more historic buildings have received significant preservation work. All of the 1,092 housing units in the Presidio, both historic and non-historic, have been rehabilitated. The final 11, located in seven historic buildings at the Public Health Service district, were completed in 2010. Six of the major multi-million-dollar historic building rehabilitation projects have been certified to receive tax credits through the federal historic preservation tax incentives process (Figure 17). The NPS and the Golden Gate National Parks Conservancy completed the multi-million-dollar Crissy Field marsh and airfield restoration project in 2001. In order to restore the historic 1920s airfield, create a tidal marsh, and develop recreational opportunities along San Francisco Bay, the NPS removed 32 historic buildings.

The largest new construction project to date under Trust jurisdiction in Area B is the Letterman Digital Arts Center. This project removed an eight-acre parking lot and the ten-story non-historic Letterman Hospital and associated research building. Combined, these two large structures included 850,000 square feet of building space. In their place, a 23-acre office campus of equivalent square footage, with three- and four-story buildings and a seven-acre public park, was constructed.

[50] *Building 135, the enlisted men's club (today's Golden Gate Club), was constructed in 1949, four years after closure of the current period of significance. The 1993 update (National Park Service 1993) determined that the building contributes to the landmark because it "relates directly to the long-spanning significance of the Presidio in military history." According to the 1993 update, it also may be individually eligible for listing in the National Register due to its 1951 hosting of joint security pact delegations that followed the end of World War II.*


San Francisco Bay
Crissy Marsh
Main Parade
Infantry Terrace
Tennis Court
Arguello Blvd.
Fisher Loop
Lincoln Blvd.
Doyle Drive / Highway 101
Mason St.
Riley Ave.
Org St.
Taylor Rd.
Bliss Rd.
Montgomery St.
Sheridan Ave.
Anza St.
Owen St.
Graham St.
Sall St.
Keyes Ave.
Moraga St.
Mesa St.
Halleck St.
Funston Ave.
Lardie Ave.
Presidio Blvd.
Martinez St.
Girard Rd.
Edie Rd.
Thornburg Rd.
Gorgas Ave.
Quarry Rd.
MacArthur
Wanlen
Portola
0
400 FT
N
Source: Presidio Trust 2010
Main Post Planning District
Native Plant Restoration
Reforestation
Landscaping



Source: Presidio Trust 2010

The Trust has also signed a development agreement for the adaptive use and rehabilitation of the 1932 Main Hospital (Building 1801) in the Public Health Service district, which began construction in 2008 and was completed in 2010. At 173,000 square feet of building space, the adaptive use of the Main Hospital is the largest single historic rehabilitation project to date in the Presidio. The project included removing 125,000 square feet of building area, including the non-historic wings and connector that were constructed on the front of the building, to allow for the restoration of the 1932 façade. The Main Hospital was adaptively used as apartments; the project also included compatible new construction of seven townhouse-style apartments. In conjunction with the reuse of Building 1801, the Trust rehabilitated the historic landscape and completed an adaptive reuse of the Nurses' Quarters (Building 1808) as offices. The project also included rehabilitation of the seven residential buildings along Wyman Terrace (Buildings 1809-1815).

The Trust is planning to revitalize the Tennessee Hollow upper watershed and rehabilitate the Main Parade. The Tennessee Hollow project includes enhancement of both natural and historic resources while providing for rehabilitation of existing ball fields. The Main Parade project will rehabilitate the historic drill field in front of the Montgomery Street Barracks by replacing seven acres of asphalt pavement with landscape features and grass. The project will also create an opportunity for interpreting the history of the Presidio through a series of landscape treatments along the Anza Esplanade, which will become a "walk through time."

The project that will create the greatest change to the Presidio will be the Federal Highway Administration's Doyle Drive replacement project.[51] This more than $1 billion project will remove all or a portion of four historic buildings as well as two historic roads for the construction of a parkway replacement structure for the NHLD-contributing Doyle Drive. The new parkway will have a combination of raised, at-grade, and below-grade segments that will include landscapes ranging from restored habitat corridors to re-created historic bluffs.

Main Post Integrity

The National Register of Historic Places identifies seven criteria for considering the integrity of a National Register property: location, design, setting, materials, workmanship, feeling, and association. Integrity is assessed as the property exists now in relationship to its

[51] *In 2000, the Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), and San Francisco Transportation Authority (SFCTA) proposed an undertaking to replace Doyle Drive, a National Register-eligible roadway that connects the Golden Gate Bridge with Richardson Avenue. The purpose of the project is to address seismic and safety deficiencies in the existing structure. As the lead agency, FHWA determined that its project would have an adverse effect on the Presidio NHLD, and thus initiated consultation under Section 106 of the NHPA with Caltrans serving as primary contact in the consultation process. Cooperating agencies for the consultation include the NPS, the Department of Veterans' Affairs, and the Trust. The Final Finding of Effect was completed in December 2005 with an addendum Finding of Effect completed in February 2007 (SFCTA and FHWA 2007). NEPA compliance for the project is complete, with a final Environmental Impact Statement/Report (EIS/R) released in September 2008 and associated Record of Decision signed in December 2008.*

period of significance. For a property with a very long period of significance such as the Presidio, the integrity is a product of the total elements remaining at the end of the period of significance (in this case, 1945) rather than the completeness of resources from any one of the periods of development. When the National Register form is written for such a property, the integrity is assessed by comparing the appearance and completeness of that property at the time of the writing against the property's appearance and completeness at the end of the period of significance. In essence, the property is assessed for how well it still conveys the significance for which it was determined eligible for the National Register. The CLA states:

> *While the historic landscapes associated with most of the eras are clearly significant, no single period has primary integrity. Today's Main Post is a virtual 'palimpsest' of historic fabric – a place where each successive development period overlaps and modifies the physical record of previous periods. Thus the site's overall historic integrity is grounded in a rich but fragmented record of continuity and change. It is a living mosaic of 200 years of growth and adaptation under the influence of local geography, world history, changing social values and technological innovation. Key aspects of the district's integrity lie not only with the individual historic buildings but in their location, setting, and the relationship between them and adjacent elements. The Post's complex composition allows the informed viewer to see and feel the dynamic of two centuries of military landscape change in a single location.*

At the writing of the 1993 update, it was found that even with the changes made after 1945, the Presidio and the Main Post exemplified enough of the seven aspects of integrity to retain the property's listing as a National Historic Landmark. The projects that have been accomplished in the Main Post since 1993 have not diminished the integrity that qualified it as part of a NHLD. A summary of the aspects of integrity as they relate to the Main Post follows.

Design, Materials, and Workmanship The Main Post district reflects the changing tastes in design, the evolving methods of construction, and the craftsman's building arts that were prevalent or popular for each period of the Presidio's development. While the majority of the resources related to the Spanish and Mexican period have been removed, the evidence of design, construction materials, and workmanship can still be found in archaeological remains as well as within the walls of the Officers' Club. After 1945, buildings were removed and added to the Main Post. Enough resources and examples of the entire history of the Main Post remain, however, to convey the elements of design, materials, and workmanship as they existed at the close of the period of significance in 1945.

In particular, the Main Post still conveys the design integrity of a post that evolved over many years of growth even though individual structures or landscape elements were changed, removed, or added after 1945. The form, plan, and structure of the Main Post still exist as established by the location, layout, and orientation of El Presidio. The basic form and configuration of standard military planning also still exist at the Main Post. The post aligns along an axis that has the former headquarters building (now the Officers' Club) at the head and support structures at the foot, with each side flanked by housing and barracks. The spatial relationships among open spaces and buildings remain largely intact (with some exceptions, such as the intrusion of Buildings 35, 38, and 39 into the Old Parade), as does the grid of streets that connect these elements. The rhythms of buildings that line the streets and parade grounds also remain largely intact, particularly along

Funston and Montgomery Streets. Removal of the majority of Civil War barracks and other structures along the boundary between the Old Parade and the Main Parade, leaving only Buildings 86 and 87, has diminished the "rhythm" in this corridor, but the historic street grid remains, ensuring that not all of the original relationships are lost. Though uses changed in buildings over the years, original building uses, such as barracks buildings, can still be discerned because of their standard military architecture.

Location and Setting The Main Post still conveys the aspects of location and setting as these relate to the significance for which the Presidio was listed as an NHLD. Though greatly expanded from its beginnings as a Spanish outpost, the Main Post still commands the Presidio's central valley and strategically overlooks the Golden Gate and San Francisco Bay. The Spanish located here for defensive purposes, and the Main Post remained at this location as the command for the U.S. Army on the west coast for much the same reason. Though San Francisco has developed around the Presidio, the Main Post remains distinct from the surrounding urban environment, separated by stands of historic forest, and organized around formal landscape features and ceremonial open spaces.

Feeling and Association The Main Post still retains the feeling of a military installation. Even with the changes after 1945, enough of the post's built environment remains to convey its association with the long and important military history for which it was listed as an NHLD. The buildings and landscapes of the Main Post retain a military character and the site conveys to an observer the connection with the U.S. Army command that presided over the Spanish American War and the two world wars. While little remains to allow an observer to connect with the Spanish and Mexican history at the Presidio, the archaeological remains of El Presidio are intact and can be interpreted to the visitor.

ENVIRONMENTAL CONSEQUENCES

Methodology

The methodology used to assess potential impacts of the actions considered in the final SEIS is derived from that provided in the final PTMP EIS. Potential impacts on historic resources, including the NHLD, were evaluated on pages 196 through 219 of the final PTMP EIS by determining physical changes from proposed building demolition as well as from proposed new construction. Analysis in the final PTMP EIS presented a district-by-district discussion of proposed changes, including the maximum allowable new construction and demolition. The PTMP's Planning Principles and District Guidelines and regulatory requirements were to be applied to reduce or eliminate potential adverse impacts. These guidelines apply to the projects described in the Main Post Update as well. The methodology in the final PTMP EIS also incorporated the Trust Act's requirement for a comprehensive management program to reduce expenditures and increase revenues. That program was necessarily to include demolition of structures that could not be cost-effectively rehabilitated and that were identified for demolition in the NPS's General Management Plan Amendment.

The final PTMP EIS methodology further described the responsibilities of federal agencies under Sections 106 and 110 of the NHPA. Under Section 110, federal agencies are to ensure that historic preservation is fully integrated into ongoing programs. Additionally, under Section 110(f), federal agencies must exercise a higher standard of care

when considering undertakings that may directly and adversely affect National Historic Landmarks. Execution of the 2002 PA signed by the Trust, the Advisory Council on Historic Preservation (ACHP), the California State Historic Preservation Officer (SHPO), and the NPS satisfied obligations under Sections 106 and 110 (Presidio Trust 2002). Two historic preservation organizations, the National Trust for Historic Preservation and the Fort Point and Presidio Historical Association (now known as the Presidio Historical Association), participated in the consultation and signed the 2002 PA as concurring parties.

The Section 106 consultation for the PTMP did not include assessment of effects because the PTMP is a programmatic document and the description of projects anticipated at that time was not adequate to assess potential effects on historic and archaeological resources. The 2002 PA, therefore, stipulated a process wherein the Trust's Federal Preservation Officer and other historic preservation staff would identify historic properties, establish an Area of Potential Effects, and assess effects for each project. For proposed undertakings that would have no adverse effects, the 2002 PA allows review among Trust historic preservation staff without outside consultation. Reviews performed without outside consultation are thoroughly documented and an annual report is distributed to inform PA parties of actions that have been reviewed under the 2002 PA. For proposed undertakings that would have an adverse effect, the 2002 PA stipulates that consultation shall be conducted according to the Advisory Council on Historic Preservation's regulations that implement Section 106.[52] Also stipulated in the 2002 PA is a "streamlined" process for consultation with the signatory parties for review of planning documents that will not have an adverse effect.

Potential effects on historic resources from proposals identified in the Main Post Update were assessed in a Section 106 consultation that was initiated through the PA. Review by the Trust historic preservation staff determined that actions proposed in the Main Post Update would have the potential for adverse effect. Therefore, a consultation with the appropriate parties was begun in November 2007. Multiple meetings have been held with interested parties since the consultation was initiated. During the identification phase of the consultation, the Area of Potential Effects was established as the entire NHLD (Figure 15). In order to address the assessment of potential effects, the Trust released a draft Finding of Effect in August 2008. A revised Finding of Effect, which assessed the preferred alternative as described in the February 2009 Main Post Update, was finalized in July 2009. The assessment phase of the consultation concluded with ACHP and SHPO concurrence on a finding of adverse effect. Additional meetings in 2009 and 2010 were held to develop measures to avoid, minimize and/or mitigate those adverse effects and to draft a Programmatic Agreement for the Main Post Update (PA-MPU) (Presidio Trust 2010) to resolve the consultation. The PA-MPU is provided in Appendix B.

The analysis below identifies adverse effects on historic resources according to 36 CFR 800.5 (Assessment of Adverse Effects) under the

[52] *36 CFR Part 800, Protection of Historic Properties, was written and implemented by the Advisory Council on Historic Preservation to define how federal agencies would conduct consultation under Section 106 of the NHPA. Under the 2002 PA, consultation for an adverse effect begins at Section 800.5, Assessment of Adverse Effects, of those regulations.*

(continued)

NHPA. Adverse effects on individual historic resources (such as buildings or structures) would not be considered significant. Where applicable, the analysis also identifies adverse effects on the NHLD, which would be considered significant.

Alternative 1

Building Rehabilitation The final PTMP EIS assumed that rehabilitation and reuse of historic buildings would conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties (Secretary of the Interior's Standards) (NPS 1992) and the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995). It also assumed that the Trust would make every reasonable effort to incorporate compatible uses that require minimal alteration of the character-defining elements of the historic buildings, while meeting financial and other goals. The PTMP assumed full occupancy and rehabilitation of historic buildings by the year 2020.

Under this alternative, Pershing Hall (Building 42) would be rehabilitated for lodging, while elsewhere on Moraga Avenue, Buildings 47 and 48 would provide lab and curation facilities for the Archaeology Center. The old Post Hospital (Building 2) would be rehabilitated as the Heritage Center. Building 104 is rehabilitated and occupied, and the rehabilitation of Building 100 is underway. The remaining Montgomery Street Barracks would be rehabilitated for various mixed uses. The Presidio Theatre (Building 99) would be rehabilitated as part of a film or performing arts program. Partial landscape and building restoration in the upper Funston Avenue Officers' Quarters would have a beneficial effect on the historic district. The Archaeology Center would be housed in rehabilitated Buildings 44, 47, 48 (historic garages), and 49 (offices). New construction between Buildings 47 and 48 would enable their reuse as a state-of-the-art curation facility for housing the Presidio's archaeology collections, and to support programmatic and interpretive efforts. Overall, the adaptive use and rehabilitation efforts would ensure that historic buildings in the Main Post would be rehabilitated, which would have a beneficial impact on the Main Post district.

Stabilization and Maintenance The final PTMP EIS described a stabilization and preservation program for vacant buildings that included physical stabilization as well as monitoring. The Trust would continue to carry out routine maintenance to help stabilize both the landscapes and buildings and to ensure the continued preservation of the Main Post. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the supervision of the Trust. This program of preservation maintenance would ensure continued preservation and have a beneficial impact on the Main Post.

Demolition The final PTMP EIS analyzed building demolition for the entire Presidio and stated that demolition of historic buildings would be minimized but may be considered where such buildings cannot be cost-effectively rehabilitated or reused. The analysis further stated that any loss of historic buildings would be an adverse effect but that the Trust would ensure that the overall integrity of the NHLD would be preserved and protected. The PTMP assumed a maximum demolition of 20,000 square feet on the Main Post. The final PTMP EIS assumed that some non-historic buildings might be demolished to restore historic setting and views. The decision-making process for building demolition would be subject to public notice, outreach, environmental review, and

consultation with historic preservation agencies. Specific mitigation measures would be developed during the decision-making process.

Under Alternative 1, up to 44,000 square feet of building demolition on the Main Post would occur. This includes buildings that have already been demolished (non-historic Buildings 85 and 215), that are slated for demolition under the Doyle Drive project (Buildings 201 [half], 204, 230, and non-historic 231), and that would be demolished under this alternative (non-historic Building 211 and historic Building 46).

Because Building 46 is a small, ancillary support structure, demolition would not result in a significant impact on the historic Main Post. Demolition of Building 46 would facilitate the rehabilitation of adjacent Buildings 47 and 48 as state-of-the-art laboratory and curation facilities for the archaeology collection, supporting the Trust's efforts to study, preserve, and interpret the Presidio's history. This would have a beneficial impact on the Main Post's historic resources and on the Trust's ability to interpret them for the general public.

Buildings 201, 204, 230, and 231 are located in the northernmost portion of the Main Post district in the former Quartermaster or maintenance area. Of these, Buildings 201, 204, and 230 contribute to the landmark status; Building 231 is non-historic. Analysis of the impacts of removing the historic buildings has been conducted as part of the Doyle Drive project. Analysis of removing Buildings 85 and 215 was completed by the Trust under separate projects.

New Construction The final PTMP EIS analyzed new construction for the entire Presidio as well as for each planning district. The final PTMP EIS stated that the Trust would make every reasonable effort to minimize new construction through adapting historic properties to new uses. However, it was fully anticipated that new construction would be required for building additions, infill buildings within existing building clusters, and stand-alone structures. New construction would primarily be considered as a means to enhance reuse of historic buildings and to achieve other plan objectives.

The exact location or nature of new construction was not known at the time the final PTMP EIS was adopted. However, new construction was only to occur in existing areas of development that are identified in the PTMP. New buildings would be sited to minimize impacts, to be compatible with the historic setting, and to reinforce character-defining features of an area. They would be designed to ensure that the association, feeling, and setting of the NHLD would be protected.

The final PTMP EIS anticipated that new construction could have an adverse effect on individual buildings. However, it was also anticipated that conformance with the Planning Principles and Planning District Guidelines for each district, as well as review through the stipulations in the 2002 PA, would ensure that new construction would not impair the integrity of the NHLD. The Planning Principles require that mass, scale, style, and color of new construction be compatible with the historic setting of the Presidio. Each district's planning guidelines identify a maximum height as well as the character-defining features to be maintained or enhanced by new construction.

The PTMP assumed maximum new construction of 110,000 square feet at the Main Post. New construction would be associated with additions to historic buildings to make reuse feasible as well as with stand-alone construction where appropriate. Examples of possible new construction sites were given as replacement of the YMCA Fitness Center if it were

removed and at Graham Street "to re-establish historic spatial patterns, such as the historic edge of the Old Parade…"

New construction under Alternative 1 would not have an adverse effect on individual historic structures or the Main Post district. New construction would reinforce the historic edge of the Old Parade with a new 50,000-square-foot office building placed along Graham Street south of Building 34. Re-establishing the edge of the Old Parade would have a beneficial impact on the Main Post. New construction would be associated with additions to other historic buildings, including those already analyzed in separate NEPA and NHPA processes for two Montgomery Street Barracks (Buildings 100 and 104). New construction would also facilitate the reuse of and expanded programs for the Presidio Theatre (Building 99) and the Presidio Chapel (Building 130), as well as the establishment of the Archaeology Center, as described below.

Presidio Theatre The historic building would be rehabilitated as a single-screen auditorium. The new 18,000-square-foot addition to the building would house two smaller theaters as well as lobby and circulation space. The new addition would be located on the west side of the historic building, separated by a transparent "connector" and oriented toward Moraga Avenue so as to use the main entrance of the historic theater. Buildings 99 and 100 effectively screen the new addition from the historic heart of the Main Post, although the addition would be visible from Sheridan Avenue, the main entrance to the historic post from the west. Conformance with the project parameters in the Main Post Update, preparation of a historic structures report (HSR) to guide the building rehabilitation and new addition, application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new addition would not have a significant impact on either the adjacent historic structures or the Main Post.

Presidio Chapel The historic chapel building would be rehabilitated and seismically upgraded for continued use as an interfaith center. A new 4,000-square-foot addition to the building would expand program space and facilitate accessible building circulation, including an elevator. The new addition would be oriented perpendicularly to the west side of the historic building and set back from the chapel's primary facade. Conformance with the project parameters in the Main Post Update, preparation of an HSR, application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new addition would not adversely affect either the adjacent historic structure or the Main Post.

Archaeology Lab and Curation Facilities Lab and curation facilities for the archaeology collection would include construction of a 500-square-foot, single-story, connecting foyer between contributing Buildings 47 and 48 (1,500-and 1,600-square-foot garages, respectively, both constructed in 1940). The size and scale of the infill construction would be smaller than, and about the same height as, the two garage buildings, while retaining the historic utilitarian feel of a garage area fronted by a service alley (Hardie Avenue). The new construction would facilitate the rehabilitation of the garage buildings, which together would function with rehabilitated Buildings 44 and 49 and portions of Building 50 as a public-serving resource (the Archaeology Center). Construction of the foyer would not adversely affect the historic resources and would have an overall beneficial impact on the NHLD.

Alternative 2

Building Rehabilitation Under this alternative, buildings would be rehabilitated for a variety of visitor, cultural, lodging and retail activities, as well as other supporting uses. The proposed Heritage Center would be located in Building 50; changes to the building would be concentrated in non-historic portions of the building. Treatment of the remaining contributing buildings on the Main Post would follow the Secretary of the Interior's Standards for the Treatment of Historic Properties (NPS 1992), the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995) and, where appropriate, the California State Historic Building Code. Adaptive use and rehabilitation of these historic resources would have a beneficial impact on the buildings and on the NHLD.

Stabilization and Maintenance As under Alternative 1, the Trust would continue to carry out routine maintenance to help stabilize both the landscapes and buildings and to ensure their continued preservation. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the Trust's supervision. This preservation maintenance program would ensure the continued preservation of the contributing resources in the Main Post.

Demolition Under this alternative, up to 94,000 square feet of building space would be demolished. Analysis of building demolition includes structures that have already been demolished (Buildings 85 and 215) or are part of the Doyle Drive project (Buildings 201, 204, 230, and 231); demolition of these structures has been subject to previous environmental review. In addition, the analysis includes the proposed demolition of a garage (non-historic Building 98), a shed (historic Building 46), Trust headquarters (non-historic Building 34), and Herbst International Exhibition Hall (non-historic Building 385), and the removal of World War II Barracks (Buildings 40 and 41). Of these, Buildings 40, 41, and 46 are contributing structures to the NHLD.

Buildings 40 and 41 represent two of the five remaining structures constructed during the World War II epoch at the Main Post (1941-1945), and two of the remaining 15 World War II "temporary"-type structures remaining at the Presidio.[53] Until 2001, a large collection of "temporary"-type structures existed on Crissy Field, but the majority were removed by the National Park Service to accomplish the Crissy Field restoration.[54] The relocation or demolition of Buildings 40 and 41 would reduce the collection of remaining resources constructed during the World War II epoch at the Main Post but would allow for revealing and interpreting El Presidio.

Demolition of Buildings 40 and 41 under this alternative would result in a significant impact on the historic resources of the NHLD by diminishing the landmark's ability to convey the entire period of significance through its built resources. Relocation of Buildings 40 and 41 to another site on the Main Post, or elsewhere in the Presidio, would

[53] *According to the 1993 NHL update, "Many of the buildings on Post from [the World War II period] were constructed rapidly in 1941 and 1942… these buildings were of a light and standardized "temporary"-type wood-frame construction with low gable roofs, wood siding, and spare architectural detailing" (NPS 1993).*

[54] *Several "temporary"-type structures at the east end of Crissy Field were removed to restore the Crissy Marsh.*

reduce this impact to a less-than-significant level, as the overall inventory of "temporary" buildings in the Presidio would be unchanged. Demolition or relocation of Buildings 40 and 41 under Alternative 2 would enhance the character of the open space in the *plaza de armas* of El Presidio but this action would be undertaken at the expense of the two World War II buildings that also contribute to the landmark. In short, Alternative 2 would make enhancement of El Presidio – an extremely unique resource in California and the western United States – a priority, at the expense of a resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

Demolition associated with the Archaeology Lab and Curation Facilities under Alternative 2 would be the same as under Alternative 1.

New Construction This alternative includes 146,500 square feet of new construction on the Main Post. New construction would include the following.

Lodge Under this alternative, the lodge would be located at the Graham Street site analyzed for new office construction under Alternative 1. New construction for the lodge would demolish non-historic Building 34 and replace it with a series of one-and-two-story structures, connected by outdoor walkways and passages, totaling no more than 70,000 square feet above grade. Below-grade parking would be located underneath the current site of Building 34. The new lodge buildings would be configured on the site south and west of Buildings 86 and 87 in a pattern roughly based on the 19th century buildings that stood on the site until they were removed by the Army after 1945. Buildings 86 and 87 (currently used as office) may be incorporated into the lodge program. As under Alternative, 1, Pershing Hall (Building 42) would also be rehabilitated as a hotel (as described under Building Rehabilitation for Alternative 1).

The new lodge buildings located south of Buildings 86 and 87, and set back 150 feet north of Building 95, would be lower (30 feet tall) than the neighboring Graham Street Barracks (40 feet tall); the two new buildings west of Buildings 86 and 87 would be single story (15 feet tall). New construction between Graham and Anza streets, on the site previously occupied by 19th century barracks and administrative and support buildings, would re-establish an important historic character-defining feature of the Main Post: the separation of the Old Parade and the Main Parade.

The lodge would have less impact on surrounding historic resources than the 50,000-square-foot office building described under Alternative 1. This would be accomplished by reducing the overall non-historic square footage on the site (approximately 70,000 square feet under Alternative 2 versus 82,000 square feet under Alternative 1); by basing the building design on the pattern of historic development that existed on the site during the period of significance; by separating the lodge buildings into smaller structures connected by outdoor walkways, so that they do not read as an unbroken wall of new construction; and by shifting the building site north (away from the historic Building 95).

Conformance with the project parameters in the Main Post Update, preparation of Historic Structure Reports (HSRs) for Buildings 86 and 87 (should they be included in the lodge scheme), application of district-wide design guidelines, and the design review process in the PA-MPU would ensure that the new construction would not adversely affect either the adjacent historic structures or the Main Post.

Additional New Construction New construction associated with the Presidio Theatre and addition, Presidio Chapel and addition, and archaeology lab and curation facilities would be the same as under Alternative 1. Conformance with the project parameters in the Main Post Update, application of district-wide design guidelines, and/or reviews under the PA-MPU would ensure that the new construction would not adversely affect either the adjacent historic structures or the NHLD.

Landscape, Traffic, and Parking Modifications This alternative would include complete or partial conversion of five historic roadways to serve as either parking lots or pedestrian walkways. While removal of cars and asphalt would alter the appearance and present-day function of the contributing resources, width, alignment and paving materials designed as part of the roadway rehabilitations would be historically compatible. This provision would protect the overall historic circulation pattern at the Main Post, return some roads to their pre-automobile function and appearance, and avoid adverse effects to the resources.

Construction of five new surface parking lots will not adversely affect historic resources at the Presidio. Underground parking at the Main Post bluff would adversely affect archaeological resources, as described in Section 3.7, Archaeology.

Alternative 3

Building Rehabilitation New uses would include facilities that would welcome the public as well as facilities with community and education programs. Pershing Hall (Building 42) would be rehabilitated as a small hotel and the upper Funston Avenue Officers' Quarters (Buildings 11-16) would be converted to bed-and-breakfast-style inns. Similar to Alternative 1, uses with assembly occupancy requirements may require substantial modifications to meet seismic code requirements. However, application of the California State Historic Building Code would allow for interpretation of code requirements and innovative solutions such that historic building rehabilitations would meet the Secretary of the Interior's Standards while fully providing for occupant safety. Adaptive use and rehabilitation of the historic buildings would have a beneficial impact on the buildings, on the Main Post, and on the NHLD as a whole.

Archaeology Center The proposed Archaeology Center would be housed in rehabilitated Buildings 44, 47, 48 (historic garages) and 49 (offices) but would not include demolition or new construction as under Alternatives 1 and 2. The garage buildings would function as storage and program space but are not adequately sized for a curation facility; therefore, the curation facility would need to be located elsewhere in the Presidio, in a building that meets the current standards. These stringent standards make it likely that such a building would not be at the Main Post, or adjacent to the archaeology staff offices or the El Presidio site.

Presidio Theatre The historic building would be rehabilitated as a single-screen auditorium. Preparation of an HSR to guide the building upgrade would ensure that rehabilitation and reuse of the historic building would conform to the Secretary of the Interior's Standards and result in no adverse effect.

Presidio Chapel The historic chapel building would be rehabilitated and seismically upgraded for continued use as an interfaith center. Preparation of an HSR would ensure that the rehabilitation would not adversely affect the historic structure.

Stabilization and Maintenance As under Alternatives 1 and 2, the Trust would continue to carry out routine maintenance to help stabilize and preserve both the landscapes and buildings. Building tenants would prepare preservation maintenance plans for buildings they lease and would be responsible for carrying out routine maintenance under the Trust's supervision. This preservation maintenance program would ensure the continued preservation of the contributing resources in the Main Post.

Demolition Under this alternative, up to 64,000 square feet of buildings would be demolished. This includes buildings that have already been demolished (Buildings 85 and 215) and those that were analyzed as part of the Doyle Drive replacement project compliance process (Buildings 201, 204, 230, and 231). Like Alternative 2, this alternative would allow for removal of the World War II barracks (Buildings 40 and 41) from the El Presidio site in order to enhance the interpretive program for the Spanish-era site. Alternative 3 would also remove the Presidio Bowling Center (Building 93) and the tennis court (historic Structure 96) in order to construct the History Center (see below). Of the resources described above, Buildings 40, 41, 201, 204, and 230 and Structure 96 are contributing structures to the NHLD.

As described in the analysis of Alternative 1, demolition of historic buildings would be an adverse effect. As under Alternative 2, demolition of Buildings 40 and 41 would result in a significant impact on the historic resources of the NHLD by diminishing the landmark's ability to convey the entire period of significance through its built resources. Relocation of Buildings 40 and 41 to another site in the Main Post, or elsewhere in the Presidio, would reduce this impact to a less-than-significant level, as the overall inventory of "temporary" buildings in the Presidio would be unchanged. The removal of the tennis court (Structure 96), a supporting recreational structure, would not significantly affect the historic Main Post.

New Construction This alternative proposes up to 77,000 square feet of new construction, which is less than the 110,000 square feet proposed under the PTMP, and less than the 146,500 square feet proposed under Alternative 2. New construction would be limited to the History Center and incidental new construction, primarily for building additions needed for rehabilitation and reuse of historic buildings.

History Center The 48,000-square-foot History Center would be constructed on the site south of the Main Parade, bounded by Montgomery Street, Moraga Avenue, Arguello Boulevard, and Sheridan Avenue. The new building would be constructed with one story above grade (with mechanical equipment rooms and a roof terrace in a limited second story) and one story below grade (primarily to accommodate parking). Maximum height of the building would be 45 feet (average). Demolition of the historic tennis court (Structure 96) would be required to accommodate the new building. The above-grade portion of the new building would be approximately 32,000 square feet larger than the existing Bowling Center. The proposed site for the History Center was mostly open until 1942 when the Red Cross building and a dental facility, both one-story low-density buildings, were constructed. Parking lots on either side of the dental facility and the tennis court maintained a feeling of informality on the southern edge of the Main Parade. The non-historic Bowling Center, another one-story building, replaced the dental facility in 1989 with a finding of no adverse effect under Section 106.

Construction of a new building the size of the History Center on this site would introduce a focal point at the southern boundary of the Main Parade that would be inconsistent with the overall historic character of its setting. The introduction of a large new element on this site would adversely affect "relationships between buildings and other features or open space" as described in the National Register aspects of integrity under "setting" (Shrimpton, ed. 1997). The new building would change the "feeling" of the historic site by creating a formal southern edge to the Main Parade Ground where none had previously existed. The location, size, and scale of the new building would partially obscure the primary façade of Building 100, when viewed from much of the Main Post. Introduction of the History Center onto the site would have an adverse impact on the historic Main Post and potentially the NHLD. Conformance with the design guidelines in the Main Post Update would provide design compatibility for the appearance of the new building but without additional mitigation measures would not fully mitigate the impact. Underground parking for the History Center could adversely affect archaeological resources, as described in Section 3.7, Archaeology.

Alternative 4

Under this alternative, no significant park enhancements or physical changes would occur beyond those already permitted or underway. Existing buildings and activities would remain and there would be no further building demolition or new construction.

Building Rehabilitation Historic buildings would be rehabilitated consistent with the Secretary of the Interior's Standards, and therefore this alternative would have no adverse effect on these historic resources. If tenants could not be identified in a reasonable period of time, the buildings would be stabilized and secured. Where implemented, rehabilitation of historic buildings would have a beneficial impact on the Main Post district.

Stabilization and Maintenance Since rehabilitation of historic buildings would not be ensured under this alternative, stabilization and maintenance measures set forth in the final PTMP EIS would be implemented. Vacant buildings would be stabilized and/or moth-balled, and an inspection and monitoring program would be instituted to prevent deterioration. The Trust's ongoing routine maintenance program would address these buildings and associated landscapes. These measures would significantly reduce the potential of adverse effects from benign neglect on the individual historic resources and the Main Post district.

Demolition Building demolition would be primarily limited to that associated with and evaluated under the Doyle Drive project (Buildings 201 [half], 204, 230, and 231).

New Construction Construction would be limited to approximately 26,000 square feet and would be generally associated with previously evaluated projects that have been completed or are underway. No significant impact on the Main Post district would occur. Analysis of impacts of this new construction was completed in previous environmental documents.

MITIGATION MEASURES

The following mitigation measures include those adapted from the final PTMP EIS.

CR-1 *Documentation of Buildings to be Relocated or Removed* Before historic buildings or additions to historic buildings are relocated or removed, appropriate mitigating measures will be determined in consultation with the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation during the Section 106 consultation process. Measures will include recordation according to the Historic American Building Survey Standards. In addition, salvage, preservation, and curation of historic building fabric may be warranted in some situations.

CR-2 *Code Compliance* The Trust will or will require that tenants upgrade buildings to meet life safety standards and to comply with applicable accessibility laws and regulations. Rehabilitation of historic buildings will include modification to meet applicable building codes to the extent practicable.

CR-3 *Long-Term Maintenance & Preservation of Vacant Buildings* Following rehabilitation of historic buildings, the Trust will ensure that tenants perform continued maintenance, thereby preventing damage to historic features and ensuring that buildings are adequately maintained. A preservation and maintenance program for unoccupied buildings will include regular inspections, necessary stabilization work to ensure long-term preservation and safe conditions for park visitors, monitoring of the condition of vacant buildings, and prioritization of stabilization and rehabilitation needs to ensure the maximum feasible preservation and protection of park resources.

CR-6 *Monitor Visitor Impacts on Sensitive Resources* The Trust will monitor sensitive cultural resources, such as historic landscape features and vacant structures, and will prioritize actions to reduce any adverse impacts on these resources caused by park visitors and new uses. Potential remedies may include temporary closure of areas, protective barriers, and informational signs.

CR-7 *Compliance with Standards for Building and Cultural Landscape Rehabilitation* The Trust will ensure that building rehabilitation projects conform with the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (NPS 1995). If new uses are proposed for historic buildings the Trust will ensure that required building modifications conform to the Secretary of the Interior's Standards for the Rehabilitation of Historic Properties. For historic landscape rehabilitation, projects will conform to the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes. Conformance will be demonstrated through provisions in the 2002 PA for consultation and reporting.

CR-8 *Ongoing Identification of Historic Properties* Consistent with requirements under Section 110 of the NHPA and the 2002 PA, the Trust will continue to evaluate for possible inclusion in the list of contributing resources those buildings or structures that may become 50 years old or may have achieved exceptional significance since the 1993 update was completed. These evaluations will also encompass archaeological discoveries.

CR-9 *Stipulations and Mitigations Resulting from the Section 106 Consultation (new)* The Trust will incorporate in the implementation of SEIS proposals any avoidance, minimization or mitigation measures that have been stipulated in the PA-MPU that resolved the NHPA Section 106 consultation, including additional consultation, design reviews and the preparation of supplementary documentation (such as HSRs or a Cultural Landscape Report).

REFERENCES

Advisory Council on Historic Preservation (ACHP). 2002. *Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962).* 67 FR 39,332, June 7, 2002.

Center for Air Force History. 1999. *Coming in from the Cold: Military Heritage in the Cold War: Report on the Department of Defense Cold War Legacy Project.* Department of Defense.

Henry, Patty, ed. 1999. *National Register Bulletin 16: How to Prepare National Historic Landmark Nominations*. National Park Service.

National Park Service (NPS). 1992. *Secretary of the Interior's Standards for the Treatment of Historic Properties.*

NPS. 1993. *1993 Update to the National Register of Historic Places Registration Forms for the NHLD*. Golden Gate National Recreation Area, California. Dated October.

NPS. 1995. *Guidelines for Rehabilitating Buildings at the Presidio of San Francisco.*

Presidio Trust. 2002. *Programmatic Agreement Among the Presidio Trust, National Park Service, The Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Regarding the Presidio Trust Implementation Plan and Various Operation and Maintenance Activities for Area B of the Presidio of San Francisco, Golden Gate National Recreation Area*.

_____. 2010b. *Programmatic Agreement Among the Presidio Trust, the Californian State Historic Preservation Officer, the National Park Service, and the Advisory Council on Historic Preservation, for the Main Post Update to the Presidio Trust Management Plan, Presidio of San Francisco National Historic Landmark, San Francisco, CA.* Dated November.

San Francisco County Transportation Authority (SFCTA) and Federal Highway Administration (FHWA). 2007. *South Access to the Golden Gate Bridge – Doyle Drive Project: Finding of Effect.*

Sherfy, Marcella and W. Ray Luce. 1990. *National Register Bulletin 22: Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Past Fifty Years.* National Park Service.

Shrimpton, Rebecca H., ed. 1997. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.* National Park Service.

SMWM, Presidio Trust, National Park Service, and the Office of Cheryl Barton. 2002. *Principles for the Future: A Cultural Landscape Assessment of the Main Post.*

Sucre, Rich, Christina Dikas, and Cora Palmer. 2008. *Memorandum on National Register of Historic Places Determination: Post-1947 Main Post Resources.* Page & Turnbull.

Thompson, Erwin N. 1997. *Defender of the Gate: The Presidio of San Francisco, A History from 1846 to 1995.*

3.7 Archaeology

AFFECTED ENVIRONMENT

Prehistoric Sites

In America, prehistoric sites are generally defined by archaeologists as the physical evidence of the Native American occupation prior to European colonial contact. These native peoples and their descendants were the first inhabitants of the Presidio. Today, some of the descendants are known as the Ohlone. While there is little evidence of prehistoric cultures of the San Francisco Bay Area between 11,500 and 3,500 B.C., it is likely that the Ohlone and culturally similar populations occupied this part of the San Francisco Bay Area for at least two to three thousand years prior to its colonization by the Spanish and possibly much earlier. Recent studies suggest that population densities were 2.0 to 3.0 persons per square mile at the north end of the San Francisco peninsula prior to colonization (Milliken, et al. 2007). However, this population was not spread thinly as this number suggests but was clustered in villages, seasonal camps, and various work areas.

Prehistoric sites at the Presidio are not identified as contributing to the National Historic Landmark District (NHLD) because they are not associated with the areas of significance that form the basis for landmark designation (Military, Explorations/Settlement, Ethnic Heritage: Hispanic, Archaeology: Historic-Non-Aboriginal). However, prehistoric properties are and can be individually eligible for the National Register of Historic Places (NRHP). There are three prehistoric properties discovered at the Presidio that have been evaluated.

The three recorded prehistoric sites at the Presidio, all within the Crissy Field district, were originally designated as SFr-6, SFr-26, and SFr-129. SFr-6, the “Presidio Mound,” was recorded in 1912 by archaeologists from U.C. Berkeley. This was one of the first prehistoric sites listed in the California archaeological site inventory for the City and County of San Francisco (CCSF). Sixty years later, in 1972, a single individual was discovered buried near SFr-6. This unforeseen and isolated burial was designated SFr-26. Carbon dating has placed this human burial at about A.D. 740. As part of the Doyle Drive archaeological investigations (Jones & Stokes 2002), the location of SFr-6 was verified in 2002 and the site underwent minimal scientific testing to evaluate its significance and better define its boundaries. Carbon dating and obsidian hydration has placed SFr-6 at about A.D. 750-1350. The California State Historic Preservation Officer (SHPO) concurred with a recommendation to combine SFr-6 and SFr-26 into one site (now designated SFr-6/26) and to consider this site eligible to the NRHP. Other subsurface testing for the Doyle Drive project did not identify additional prehistoric sites, nor have any prehistoric sites been identified through construction monitoring in Area B. However, in 1998, another site designated SFr-129 was discovered during construction of Crissy Field marsh (Area A). Recent analysis of the prehistoric resources at the Presidio and surrounding areas can be found in the draft Archaeological Treatment Plan for the Doyle Drive project (Jones & Stokes 2002).

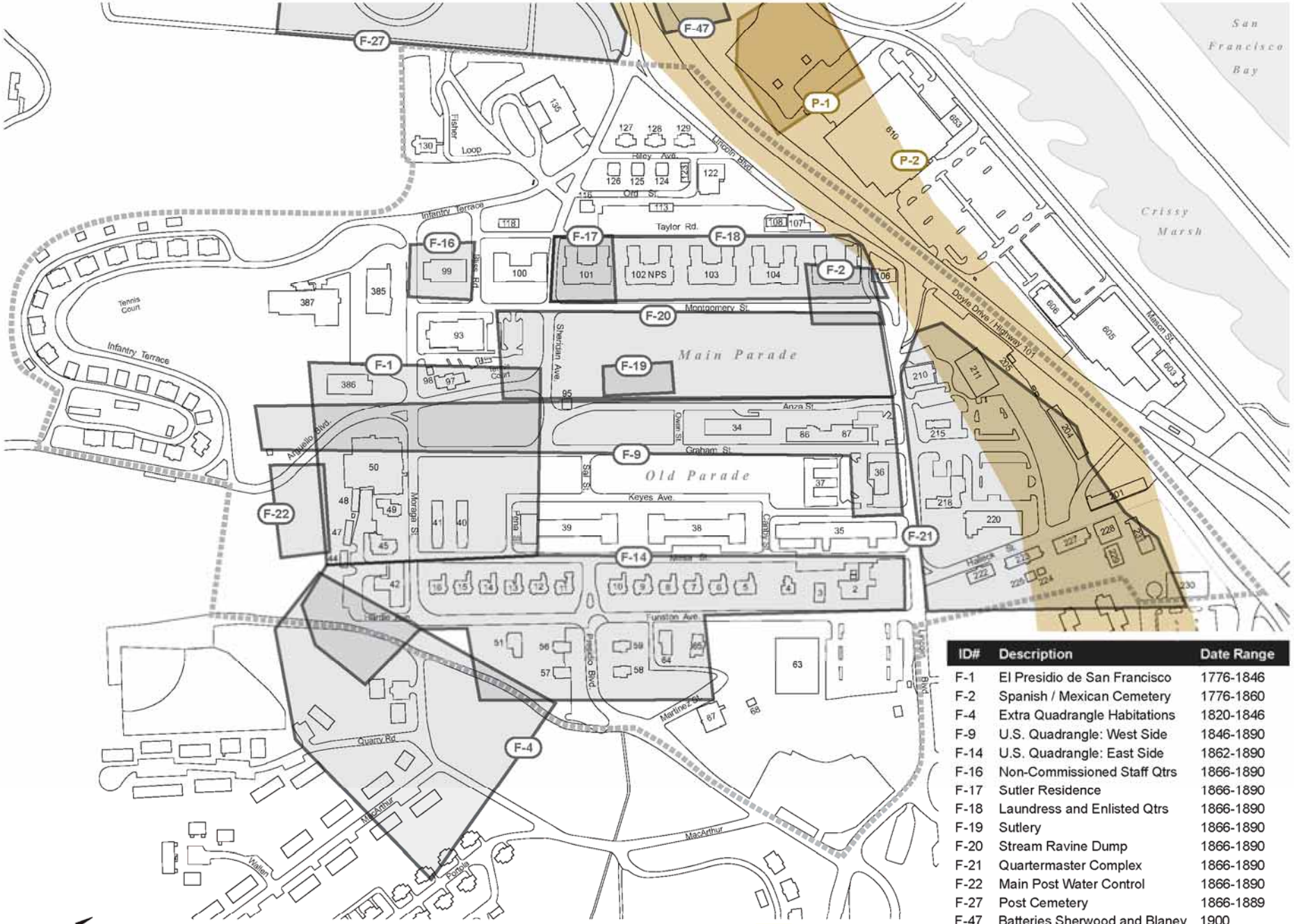
Based on archaeological discoveries within the CCSF and the GGNRA, it is possible that additional subsurface sites are present within the Presidio and discoveries of seasonally occupied and permanent prehistoric sites are likely to occur. These sites would probably be shell middens with the potential to contain human burials and related materials but could also include archaeological features representing (but not limited to) house floors, cooking areas, and specialized work areas; and various artifacts of stone, bone, and shell. As a result of two centuries of military development, there are few, if any, surface indications of prehistoric archaeological sites, but buried sites may be present in areas of the Presidio where the land has been modified by placement of fill material, encapsulating archaeological evidence. Many 20thcentury archaeological inventories in the Bay Area concentrated on the coastal environment using a model indicating that sites would most likely be near the shoreline, where aquatic foods were available, or near freshwater springs. However, it is possible that sites other than shell middens are present in or along the bluffs and in other areas away from the shoreline.

There is a potential for discovering additional prehistoric archaeological resources at the Presidio. Seasonally or permanently occupied prehistoric sites are likely because of the extensive freshwater resources and the large estuarine lagoons and sloughs that once extended along the waterfront areas. In addition to the known sites along Crissy Field, several areas were identified in the 1993 National Historic Landmark (NHL) documentation (1993 NHL update) (NPS 1993) as having Predicted Prehistoric Archaeological Potential. The Estuary Bluff, denoted as P-2 in the 1993 NHL update, overlooks the former marshlands along the Letterman district, the North Cantonment, the Main Post, the National Cemetery, and Cavalry Stables (Figure 18).

More recent predictions in the Presidio Trust Management Plan (PTMP) incorporated new information from the rehabilitation of Crissy Field, such as the discovery of SFr-129, and took a much more conservative approach, adding additional areas of Crissy Field and more areas surrounding the Presidio's natural freshwater sources, including Tennessee Hollow, the stream ravine underneath the Main Parade, and areas around Cavalry Stables. The Trust continues to update these predictions based on a more detailed understanding of the prehistoric environment. Most recently, in 2008 during the course of preparing the 2008 NHL update (Page & Turnbull, Inc. 2008), a new prehistoric sensitivity model was developed. This model took into account several environmental factors and incorporated information gathered during the 15 years since the last update (Figure 19).

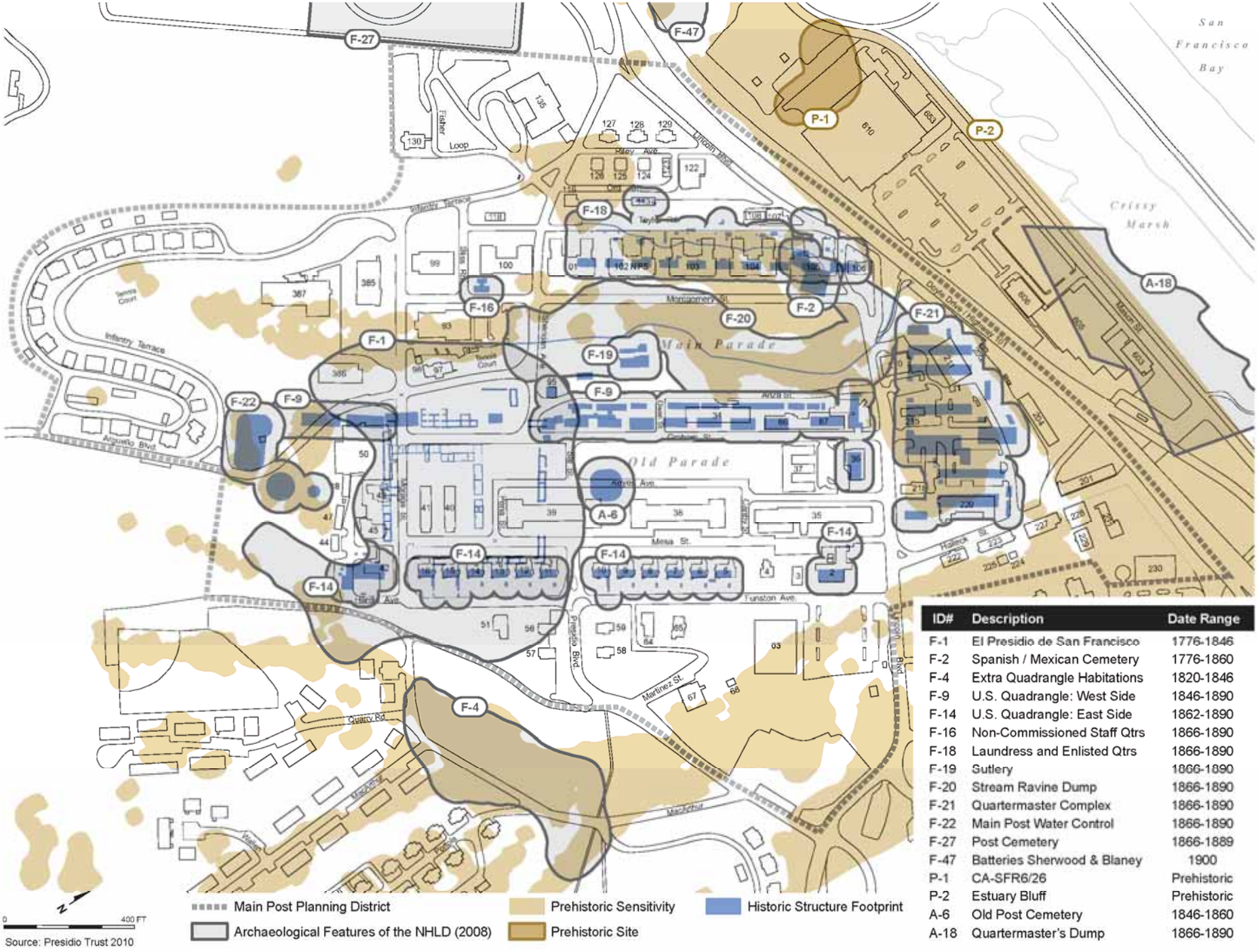
Historic Sites

At the Presidio, historic sites are generally defined by archaeologists as the physical evidence, usually augmented by written documentation, of the Spanish, Mexican, and American occupations that began in 1776, and could also include evidence of the Ohlone and other native peoples who occupied the Presidio in the 18th and 19th centuries. One of the most remarkable aspects of the Presidio's history is that multiple cultures undertook a similar military mission in the same locale over a long period of time. This history is inscribed in the landscape and buried within the ground. The historic archaeological record provides some of the earliest evidence for the establishment of the Spanish Colonial site known as El Presidio de San Francisco (El Presidio) and contains significant information pertinent to the ensuing cultural transitions and



Source: Presidio Trust 2010

ID#	Description	Date Range
F-1	El Presidio de San Francisco	1776-1846
F-2	Spanish / Mexican Cemetery	1776-1860
F-4	Extra Quadrangle Habitations	1820-1846
F-9	U.S. Quadrangle: West Side	1846-1890
F-14	U.S. Quadrangle: East Side	1862-1890
F-16	Non-Commissioned Staff Qtrs	1866-1890
F-17	Sutler Residence	1866-1890
F-18	Laundress and Enlisted Qtrs	1866-1890
F-19	Sutlery	1866-1890
F-20	Stream Ravine Dump	1866-1890
F-21	Quartermaster Complex	1866-1890
F-22	Main Post Water Control	1866-1890
F-27	Post Cemetery	1866-1889
F-47	Batteries Sherwood and Blaney	1900
P-1	CA-SFR6/26	Prehistoric
P-2	Estuary Bluff	Prehistoric



ID#	Description	Date Range
F-1	El Presidio de San Francisco	1776-1846
F-2	Spanish / Mexican Cemetery	1776-1860
F-4	Extra Quadrangle Habitations	1820-1846
F-9	U.S. Quadrangle: West Side	1846-1890
F-14	U.S. Quadrangle: East Side	1862-1890
F-16	Non-Commissioned Staff Qtrs	1866-1890
F-18	Laundress and Enlisted Qtrs	1866-1890
F-19	Sutlery	1866-1890
F-20	Stream Ravine Dump	1866-1890
F-21	Quartermaster Complex	1866-1890
F-22	Main Post Water Control	1866-1890
F-27	Post Cemetery	1866-1889
F-47	Batteries Sherwood & Blaney	1900
P-1	CA-SFR6/26	Prehistoric
P-2	Estuary Bluff	Prehistoric
A-6	Old Post Cemetery	1846-1860
A-18	Quartermaster's Dump	1866-1890

technological developments that eventually resulted in a 20th century American military post. Research suggests that historic archaeological remains from the period 1776-1890 would provide the most significant contribution to knowledge of the Presidio (NPS 1993). By 1890, the Presidio was beginning to change substantially, and documentation of design and construction was more extensive. The archaeological features dating from about 1890 and into the present century, although they might contribute information about military, social, and technological history, would often be ancillary to other sources, including documents, standing physical remains, and possibly oral history.

The colonial site of El Presidio was the basis for the Presidio's designation as a National Historic Landmark in 1962. In the 1993 NHL update, the Presidio was defined as a single historic archaeological site congruent with the property and having numerous contributing features that are functional components of a single long-term military occupation by multiple cultures. The historic archaeological features described represent a variety of types ranging in complexity from individual elements to functional groupings of features, such as neighborhoods. The 1993 NHL update took a predictive approach to identifying these contributing archaeological features. Instead of survey or extensive excavation, the predictive approach used the abundance of historical documents available to analyze, locate, and map historic features while also adapting models derived from other colonial and military sites in the West. All of the identified historic archaeological features contribute to the NHLD under Criterion D, which indicates these features have "yielded or are likely to yield important information about the past" and are of national significance.

Archaeological excavations and monitoring since 1993 have confirmed the presence of some of the predicted features; others still remain predictive. Features confirmed since 1993 are found to have a high degree of integrity, have yielded important information about the past, and have reinforced the validity of the predictive approach. The 2008 NHL update incorporates new information from archaeological investigations since 1993 that have verified the presence, further defined the boundaries, or better identified the constituents of these features. The significance of post-1890 archaeological features is being assessed in the 2008 NHL update under Criterion D especially for those populations that are poorly documented in the written records, such as women, children, and servants. Previously identified archaeological features are also being evaluated under NRHP Criterion A ("associated with events that have made a significant contribution to the broad patterns of our history"). The historic archaeological features identified in the Main Post district documented in 1993 and updated in 2008 are listed in Table 25.

Any unforeseen historic archaeological features discovered in the future could be determined to contribute to the NHLD or be individually eligible for the NRHP.

ENVIRONMENTAL CONSEQUENCES

This section describes the environmental consequences of the alternatives on archaeological resources in the Main Post district. In general, direct effects would vary and be closely related to the nature and extent of specific ground-disturbing actions, such as new construction.

25 HISTORIC ARCHAEOLOGICAL FEATURES WITHIN THE MAIN POST THAT CONTRIBUTE TO THE NHLD[1]

ID #	*Description*	*Date Range*	*Notes*
F:1	El Presidio de San Francisco	1776-1846	Original Spanish Colonial site that established the Presidio, *known* to contain substantial architectural remnants, work areas, refuse middens, and numerous other features. The area of this feature has been substantially expanded based on excavation and monitoring since 1993. This site forms the basis for the 1962 National Historic Landmark designation.
F:2	Spanish/Mexican Cemetery	1776-1860	Former burial ground *predicted* to contain remains from some of the early Spanish colonists, later Mexican-era families, and possibly some associated Native Americans.
F:9	United States Quadrangle West Side	1846-1890	Former neighborhood *known* to contain remnants of early U.S. Army-era barracks, kitchens, workshops, guard house, and headquarters. Portions of this site also overlay El Presidio.
F:14	United States Quadrangle East Side[2]	1862-1890	Existing neighborhood *known* to contain remnants from the Civil War-era Funston Avenue Officers' Quarters, Bachelor Officers' Quarters (the Corral), Post Hospital, and meteorological station. Portions of this site also overlay El Presidio.
F:16	Non-Commissioned Staff Quarters	1866-1890	Former residence *predicted* to contain remnants from this isolated structure and associated outbuildings and landscape features. Recent topographic analysis suggests this area later underwent substantial landform modifications that may have compromised its archaeological integrity.
F:17	Sutler Residence[3]	1866-1890	Former residence *predicted* to contain remnants from the Post Sutler and his family; the Sutler was the official supplier of victuals or provisions to an army outpost.
F:18	Laundress and Enlisted Quarters	1866-1890	Former neighborhood *known* to contain remnants from the residences, work areas, outbuildings, and latrines for this group of women working for the U.S. Army, their families, and later married enlisted men.
F:19	Sutlery	1866-1890	Former building *predicted* to contain remnants from the structure and associated landscape elements for the Sutler's store and warehouse.
F:20	Stream Ravine Dump	1866-1910	Buried topographic feature *known* to contain refuse deposits and possible work areas from the U.S. Army period, and most likely earlier periods including Spanish Colonial and Mexican eras.

ID #	*Description*	*Date Range*	*Notes*
F:21	Quartermaster Complex	1866-1910	Former neighborhood of storehouses, a blacksmith shop, several stables, barns, sheds, a weighbridge, farriers' shop, pig sties, and corrals *predicted* to contain remnants of the architecture, work yards, and associated deposits.
F:22	Main Post Water Control	1866-1890	Early water reservoir and gravity distribution system for water to the Main Post *predicted* to contain remnants of this early form of infrastructure.
A:6	Old Post Cemetery	1846-1860	Early location of a cemetery *predicted* based on sketch map made by Captain Gibson in the 1859 post inspection report (addition since 1993).
A:18	Quartermaster's Dump	1866-1890	Refuse area *known* to contain deposits from the Quartermaster's operations and general supplies from the Main Post and other functional areas of the Presidio. This feature was discovered during the Crissy Field (Area A) rehabilitation project (addition since 1993).

Source: Presidio Trust 2010

[1] *This list has been partially updated to reflect archaeological work since 1993 that has confirmed the presence of these features. Confirmed features are denoted in the text as known.*

[2] *As part of the 2008 NHL update, Archaeological Feature 14 was divided into two separate areas, one related to Officers' Quarters and another pertaining to the Post Hospital.*

[3] *Due to subsequent construction of the Montgomery Street Barracks and probable destruction of this feature, the 2008 NHL update does not identify F:17 as a historic archaeological feature.*

This analysis is coupled with that done under Section 106 of the NHPA. The NHPA specifies that archaeological resources must be taken into consideration before implementing, funding, or permitting any federal undertaking. Other federal laws also apply. The Archaeological Resources Protection Act defines archaeological resources; requires federal permits for excavation; provides for curation of materials, records, and other data; provides for confidentiality of archaeological site locations; and, in the 1988 amendment, requires the inventorying of archaeological resources on public lands. Also, the Native American Graves Protection and Repatriation Act (NAGPRA) specifies the federal government's responsibility for the treatment and ultimate disposition of human burials and grave-related materials.

Methodology

Trust archaeology staff and their consultants performed a series of investigations between January and December 2008 to characterize some of the predicted features identified in the 1993 NHL update. This effort included a review of the information contained in the 1993 NHL update and 2008 NHL update, new archival research, GIS analysis, and geo-archaeological assessments of Presidio soils and sediments. Using the

information assembled, the Trust developed a work plan to identify any prehistoric sites and to further identify, or more precisely to verify, the presence of contributing archaeological features identified in 1993 (Figure 18) and 2008 (Figure 19). Subsurface work was initiated at those locations where substantial excavation associated with potential new construction could occur under various alternatives.

National Historic Landmark District Review With a few minor exceptions, the identification of resources provided in the 1993 NHL update has proved to be reliable and very useful for both planning and preservation. Some of the contributing features are still predicted while others have since been verified. Because contributing status for these features has previously been established – and given the reliability of the predictions – the Trust assumes that, unless contrary data exist, the features identified by the NPS in 1993, and modified in 2008, retain integrity. Making this assumption is preferable to undertaking the destructive testing that would be required to evaluate their integrity.

Revisions to the 1993 documentation that reflect resource identification information gathered since 1993 have been made part of the 2008 NHL update. The 2008 NHL update is meant to build upon – not replace – the 1993 work and has employed the same methodology for predictive modeling in areas that have not yet been excavated. In the recent update, specific features have been mapped using state-of-the-art GIS technology and geo-referencing, with some spatial allowance for error among historic maps and for the expected sub-features associated with a structure or building (e.g., privies, gardens, yards) that would yield valuable information but that would not have been noted on most historic maps. Modifications in the 2008 NHL update were derived from three sources:

- Technical advances in GIS applications that have allowed more accurate spatial projections;
- Archival research that has generated a more robust collection of source material (such as historic maps) that can be used to identify likely features and establish boundaries; and
- Excavation data collected over the intervening years by the U.S Army, NPS, Presidio Trust, and their various contractors and academic partners.

Modifications to the contributing archaeological features in the draft 2008 NHL update have been taken into consideration to determine environmental consequences and are also represented in the FOE. The 2008 NHL update will remain in draft form until the NPS has reviewed and added this updated information to the National Register of Historic Places. The NPS may also request revisions to the draft that was previously submitted.

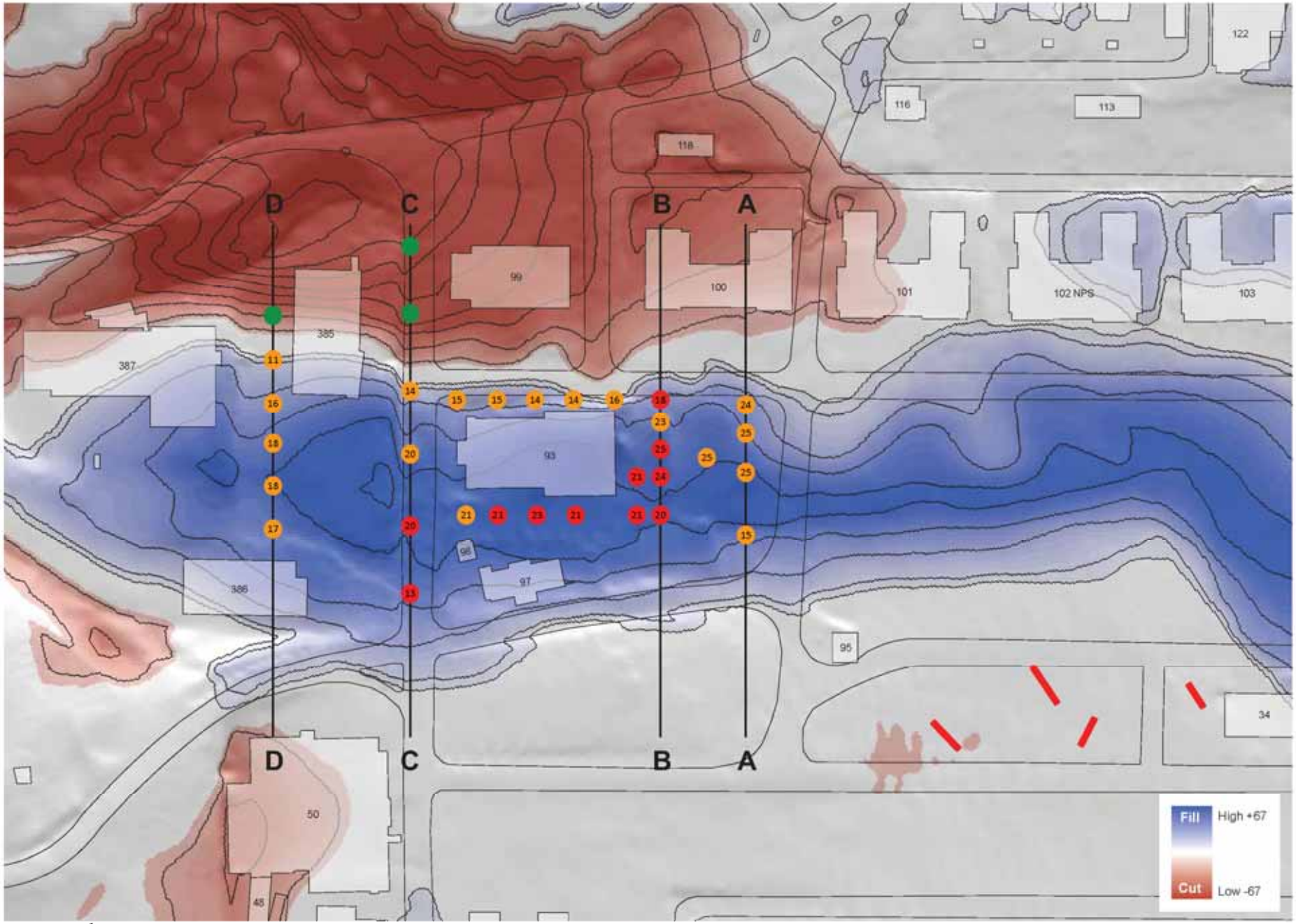
Archival Research Research into the history and development of the Presidio and especially the Main Post has been ongoing since 1993. Archival research was undertaken to further document the land use history for each area of the district where contributing archaeological features coincide with proposed new construction. Historic photographs and maps indicate that massive amounts of fill were used to level the stream ravine west of El Presidio and to create the Main Parade. This may have buried intact prehistoric or historic features from the 1870s or earlier that were located within the ravine (Reese, et al. 2008, Kaijankoski 2008). Topographic maps are the most helpful archival documents for analyzing massive landscape modifications, which can either preserve or destroy archaeological sites. Research using

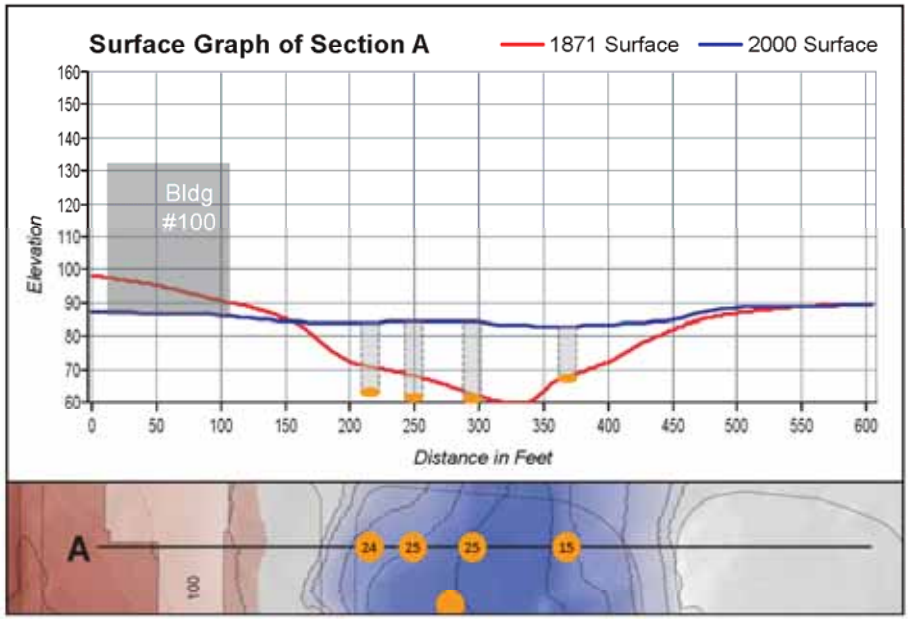
topographic maps demonstrated the need to better understand historic landscape modifications to identify depths, or subsurface horizons, at which archaeological features were likely to be located.

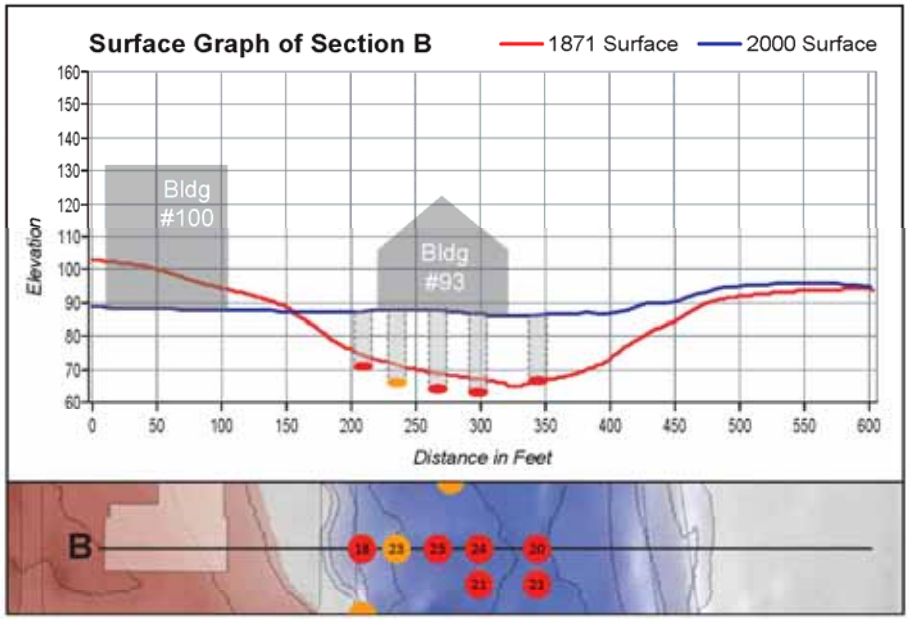
GIS Analysis Recognizing the scale and magnitude of landscape modifications and their probable effects on archaeological features, the Presidio Archaeology Lab developed a Cut/Fill Map 1871-2000 (cut/fill map) (Figures 20 and 21). The cut/fill map illustrates the evolution of the Presidio's landscape. A detailed topographic map with six-foot contour lines from the year 1871 was the earliest and best record available for this three-dimensional modeling. Once a digital model was created from the historic topographic lines it was spatially correlated with the best recent topographic survey of the Presidio, which was done in 2000. Differences between the two models were calculated and the resulting cut/fill map represents the positive or negative change in elevation between 1871 and 2000. These elevation changes allow archaeologists and planners to assess whether archaeological features are at or near the current ground surface, are buried under fill, or have been destroyed by land modifications. This work recognized that some historic archaeological features may exist intact at depths up to 25 feet *beneath* the current ground surface (such as F:20 Stream Ravine Dump) while others may have been located on previous ground surfaces that would have been up to 20 feet *above* the current ground surface and hence destroyed (such as F:16 Non-Commissioned Staff Quarters).

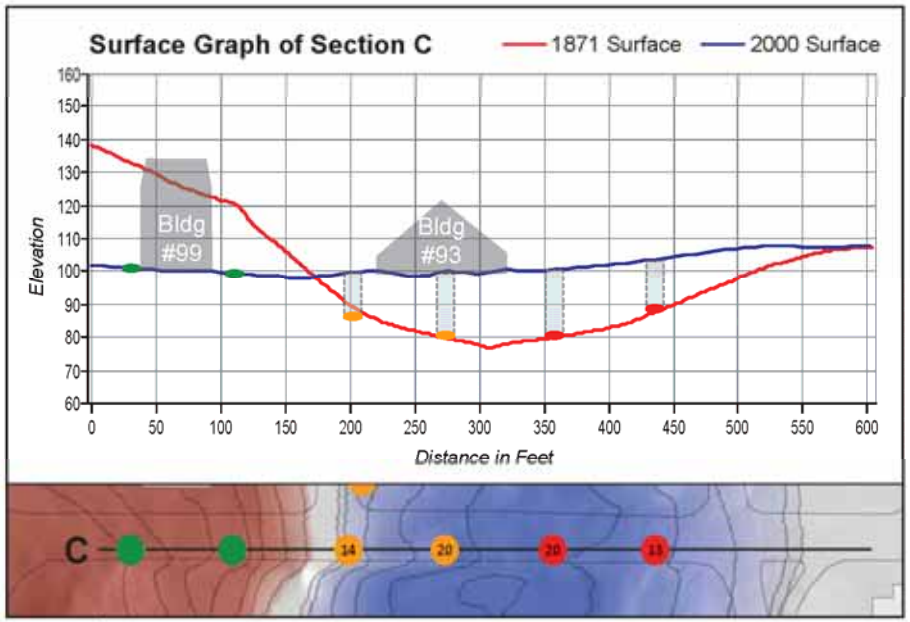
Geo-Archaeological Research Building on the information in the cut/fill map, the Trust archaeological staff and their consultants also reviewed sedimentary data, such as soil borings undertaken by the U.S. Army prior to construction of a bowling center (Building 93), that might explain natural processes and human activities that have altered the Presidio's landscape. The research found that, given the presence of freshwater, the ravine area is sensitive for prehistoric archaeological resources. Due to the nature and timing of the geologic sequence, all of the layers situated between the Pleistocene Colma Formation and the artificial fill are considered sensitive for buried prehistoric archaeological materials (Kaijankoski 2008) (Figures 20 and 21). This research also confirmed that fill soils include cultural materials, which have likely lost any integrity they may have had in their original location. Therefore, the depth of fill can serve as a guide for future efforts to avoid intact archaeological features that may be preserved in the native soils beneath this fill layer.

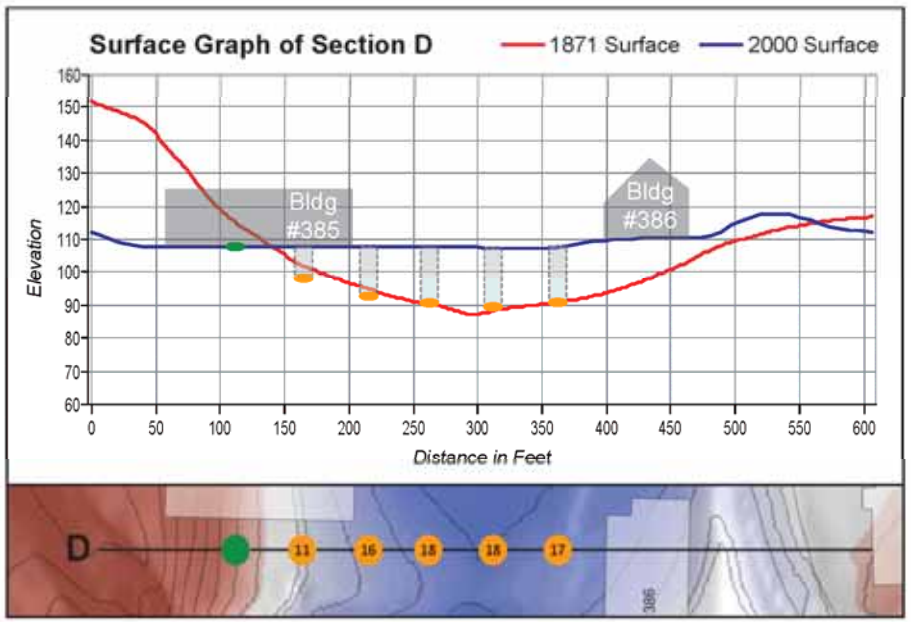
Subsurface Testing The above information was instrumental in developing and locating a work plan that consisted of two types of subsurface investigations: geoprobe cores at the site south of the Main Parade and trench excavations at the site of the proposed office (under Alternative 1) and the proposed lodge (under Alternative 2). First, in January 2008, 17 geoprobe cores were taken to a depth of up to 50 feet in and around the area at the site south of the Main Parade. In December 2008, an additional 16 soil cores were again taken within this area (Figure 21). This type of site characterization was the most practical approach given the extensive depth (up to 25 feet) of fill material in the former stream ravine and the density of modern structures and utilities (bowling center, child care center, high voltage electrical lines, tennis court, etc.). These cores were employed to corroborate the cut/fill map through direct testing so that this combined information could be used to help understand the environmental consequences and to make a determination of effect for new construction. This form of investigation was not designed to evaluate the integrity of subsurface features, because


D
C
B
A
122
116
113
118
99
100
101
102 NPS
103
385
387
93
97
98
386
95
34
50
45
Fill
High +67
Cut
Low -67
0
150 FT
N
Source: Presidio Trust 2010
21 Core Location Indicating Depth to Potential Archaeological Strata/Layer (Artifacts Present)
14 Core Location Indicating Depth to Potential Archaeological Strata/Layer (No Artifacts)
Core Location Where Potential Archaeological Strata/Layer was Previously Removed
Trench Location with Artifacts/Features
A—A Section Line
5' Contour Intervals









0 150 FT

Source: Presidio Trust 2010

A——A Section Line

21 Core Location Indicating Depth to Potential Archaeological Strata/Layer (Artifacts Present)

14 Core Location Indicating Depth to Potential Archaeological Strata/Layer (No Artifacts)

Core Location Where Potential Archaeological Strata/Layer was Previously Removed

the identified historic features F:1 El Presidio and F:20 Stream Ravine Dump were assumed to retain integrity. The cores were also used to identify the possible presence of a buried prehistoric site. Ultimately this information was used to develop design strategies to avoid adverse effects on deeply buried archaeological features.

The cores were analyzed by a geo-archaeologist at the Anthropological Studies Center of Sonoma State University (now with Far Western Anthropological Research Group). While buried Holocene paleosols were encountered, no prehistoric materials of human manufacture were encountered. Given the limited scope of this investigation, buried deposits could have been missed. The lack of evidence suggests, however, that it is doubtful that a large prehistoric feature, such as a shell mound, was missed. Areas with intact paleosols are still considered sensitive for prehistoric archaeological features (Kaijankoski 2008).

Despite the limited scope of investigation, historic period artifacts conforming to expectations for F:1 El Presidio were encountered in several of the easterly cores, including colonial-period ceramics, 19th century glass, and charcoal (Figures 20 and 21). Three of the westerly cores indicated that the historic ground surface was missing, corroborating the cut/fill map, which shows that the westerly portion of the area was cut and that the historic ground surface would have been above current grade. This observation leads to the conclusion that archaeological features in this area, including portions of F:16 Non-Commissioned Staff Quarters, would have previously been destroyed by this massive landscaping operation. The remainder of the cores established depths to historic ground surfaces varying between 5 and 25 feet below current ground surface, which further corroborates the cut/fill map.

The second subsurface tests were undertaken in March 2008 by the Anthropological Studies Center of Sonoma State University and consisted of four trenches comprising 250 linear feet of excavation placed at opposing angles within the area south of Building 34. Three of these trenches were placed at the southern end of the site proposed for the office (Alternative 1) and lodge (Alternative 2) and one within the northern extent of the site of El Presidio as identified in 2008. Unlike the former stream ravine, there were no massive landscape modifications to the area south of Building 34 and more routine excavations could be performed. Given the relatively shallow layer where prehistoric archaeological materials would be possible, and no previous or current indications, the area has a low prehistoric sensitivity. These four excavations were designed to further identify F:9 United States Quadrangle West Side, which consisted of Civil War-era barracks in this location, and to provide additional data for the northern boundary of El Presidio (Figures 19 and 20). Excavation determined that a variety of archaeological deposits consistent with F:9, such as building foundations, building materials, and historic trash deposits, still exist. The southernmost trench, placed within the site of El Presidio, recovered several artifacts and features consistent with F:1 El Presidio. Because the presence of intact elements demonstrated a level of depositional integrity consistent with previous assumptions, further destructive testing was deemed unnecessary to understand environmental consequences and to make a determination of effect.

Final Note on Methodology The methodology described above confirmed the presence of historic deposits and artifacts associated with several NHLD-contributing features previously identified by the NPS and subsequently confirmed by the Presidio Trust. It also provided additional

information regarding the features' location and especially their depth. Further, the identification process affirmed two inferences put forth in the 1993 NHL update that have been fundamental to the Trust's continued approach. The first inference was that "construction and development episodes on this military reservation have resulted in substantial alterations in original landforms which have probably both preserved and destroyed archaeological resources." This line of reasoning informed the approach to modeling the historic landscape through the cut/fill map. The Trust directly tested this surface modeling through geoprobe cores, which corroborated both the model and the original line of reasoning. The second fundamental inference was that "historic archaeological remains identified from the analysis of historic sources do exist, to the extent that they have not been obliterated by cut and fill activities." This line of reasoning informed the Trust's assumption that, unless contrary evidence exists, archaeological features found in their original location retain integrity.

Alternative 1

The impacts due to destruction of, or damage to, archaeological resources from ground-disturbing actions within the Main Post under the PTMP were analyzed on pages 215 through 219 of the final PTMP EIS. New construction and the removal of structures, pavement, or vegetation on the Main Post could adversely affect prehistoric and historic archaeological resources. In addition, ongoing repair and maintenance of buildings, structures, roads, and utilities near known archaeological sites or archaeologically sensitive areas would increase the likelihood of impacts. Underground infrastructure upgrades such as new water, sewer, or electrical connections for new construction could have as-yet undetermined effects on archaeological resources. Reuse of existing utility trenches and placement of new trenches in areas that are not archaeologically sensitive could avoid impacts.

New construction, operations, and maintenance activities would be conducted in such a manner as to avoid impacts on El Presidio and would conform to stipulations in the 2002 Programmatic Agreement (PA).[55] All other activities in proximity to El Presidio's quadrangle (defined through architectural features) and associated cultural manifestations (defined through archaeological features and other evidences of colonial occupation outside of the quadrangle walls) would be designed to minimize or avoid impacts on the site. In addition to El Presidio, ten other historic archaeological features on the Main Post contribute to the NHLD, including areas of predicted prehistoric potential that, if present,

[55] *The 2002 PA called for the Trust to prepare a draft Archaeological Management Plan for El Presidio not later than 24 months after execution of the PA. In 2004, a draft, titled Levantar: the Presidio of San Francisco Archaeological Management Strategy (Levantar), was submitted to signatories of the PA and peer reviewers for comment. It outlined the mission, goals, and programs for archaeology at the Presidio. It also proposed new directions for the archaeology facility and proposed new programs, preservation priorities, and partnering opportunities. Finally, it examined the site of El Presidio from a design perspective and offered a strategy for creating an attractive place that commemorates what lies underground. The Trust is taking an affirmative responsibility to advance the protection, enhancement, and contemporary use of El Presidio through an archaeology program that includes incremental conservation-minded excavation, a phased landscape commemoration that preserves subsurface features, interpretation of the process of archaeology to the public, and dissemination of the information being recovered through educational programs.*

may be individually eligible for the NRHP. The Archaeological Research Design for El Presidio and the Main Post (Revelar) (Praetzellis, et.al. 2008) and other archaeological management documents would apply to these historic sites as well as to El Presidio.

Specific effects of Alternative 1 on archaeological resources from new construction, rehabilitation, circulation, and parking are described below.

Office Construction of a 50,000-square-foot office building between the Old Parade and Main Parade would adversely affect F:1 El Presidio and F:9 United States Quadrangle West Side, both of which contribute to the NHLD. Approximately 12 percent of F:9 would be within the footprint of the new structure. New construction of this size would not be able to avoid direct effects to this contributing feature of the NHLD.

Archaeology Lab and Curation Facilities The limited new construction (up to 500 square feet) between Buildings 47 and 48 that would provide an accessible public entry and movement between the laboratory and curation facilities has no potential to affect archaeological features. All evidence shows this small area to have been previously graded, removing any intact archaeological features or artifacts.

Presidio Theatre The proposed addition to the Presidio Theatre (Building 99) is within the area of F:16 Non-Commissioned Staff Quarters as identified in 1993. The cut/fill map depicts the area as having undergone substantial alterations including the removal of up to 20 vertical feet of soil and sediment west of the theatre, which would have removed any archaeological potential. Limited archaeological testing supports this assessment (Kaijankoski 2008).

Presidio Chapel Rehabilitation and new construction on the west and south side of the Presidio Chapel are not anticipated to affect archaeological resources.

Circulation Proposed traffic circulation would be inconsistent with the priority outlined in Levantar (Presidio Trust and NPS 2004) to “close one block of Graham Street to through traffic.” Roadways and traffic through El Presidio would limit opportunities to interpret the colonial period and represent it in the landscape and would also make ongoing research at the façade of the earlier (circa 1792) portions of El Presidio difficult.

Parking Relocation of surface parking around the Main Post has the potential to affect near-surface archaeological features in those areas where grading or other ground disturbance is necessary. Parking on El Presidio would remain under this alternative and would continue to degrade the character of the historic landscape and diminish the ability to interpret the colonial period at the Presidio.

Alternative 2

New construction and other ground-disturbing activities, including the removal of buildings or structures on the Main Post, could adversely affect prehistoric sites and historic archaeological features. Underground infrastructure upgrades such as new water, sewer, or electrical connections for new construction could have as-yet undetermined effects on archaeological resources. Reuse of existing utility trenches and placement of new trenches in areas that are not archaeologically sensitive could avoid impacts. Ongoing rehabilitation and maintenance of buildings, structures, roads, and utilities near known archaeological sites

or archaeologically sensitive areas would increase the likelihood of impacts.

Specific effects of Alternative 2 are described below.

Lodge The new lodge on the site encompassing Building 34 and a parcel immediately south, as well as the smaller structures west of Building 86, would adversely affect portions of F:9 United States Quadrangle West Side. The area of the lodge that would affect F:9 would be of a smaller size, however, than the new construction (for an office building) assessed in Alternative 1. This smaller footprint of construction with a setback of 150 feet from the powder magazine (Building 96) would avoid construction in areas identified as F:1 El Presidio. It is assumed that the original construction of Building 34 and its basement previously destroyed any archaeological resources that may have been present within the footprint of that building. Reuse of this existing area of disturbance for underground parking would largely avoid impacts on archaeological resources.

Archaeology Lab and Curation Facilities, Presidio Theatre, and Presidio Chapel Impacts of Alternative 2 would be same as described for Alternative 1 above.

El Presidio Alternative 2 incorporates many of the ideas and proposals contained in Levantar, notably the creation of a new, state-of-the-art archaeology facility at the Main Post and the excavation and commemoration of El Presidio. Alternative 2 would advance the protection, enhancement, and contemporary use of El Presidio through an ongoing archaeology program, which is consistent with the significance of this contributing feature to the NHLD. The program would serve as a benefit to the archaeology and interpretation of the Presidio. The associated removal or relocation of Buildings 40 and 41 in Alternatives 2 and 3 would enhance the character of the open space in the *plaza de armas* of El Presidio but this action would be undertaken at the expense of the two World War II buildings that also contribute to the landmark. In short, Alternative 2 would make enhancement of El Presidio – a unique resource in California and the western United States – a priority, at the expense of a resource for which other examples exist within the Presidio and the larger Golden Gate National Recreation Area.

Circulation Alternative 2 would implement methods to intermittently close and redirect traffic away from the sections of Moraga, Graham, Pena, and Mesa streets that extend through El Presidio. The recommendation in Levantar to close “one block of Graham Street” has been modified in this alternative. Instead of permanently closing Graham Street, Alternative 2 provides for the intermittent closure of all roads through El Presidio. This occasional action would facilitate excavations, commemorations, and interpretation that would otherwise be prevented or hampered by through traffic.

Parking The reduction of parking on El Presidio to 75 cars would improve the ability to interpret the colonial period at the Presidio. It would remove parking from the earliest and smaller *plaza de armas* (the first designed open space) and enable archaeological excavation, interpretation, and public programming. Relocation of surface parking around the Main Post has the potential to affect near-surface archaeological features in those areas where grading or other ground disturbance is necessary. Underground parking at the bluff edge

(adjacent to the reconstructed Doyle Drive) would have an adverse effect on F:21 Quartermaster Complex. [56]

Alternative 3

Under Alternative 3, the potential for archaeological impacts could be less than that described for Alternatives 1 and 2. The overall area of potential ground disturbance would be reduced given the absence of an office (Alternative 1) or lodge (Alternative 2) at the site on and south of Building 34. Available evidence shows that the History Center on the site south of the Main Parade would not likely adversely affect F:1 El Presidio, given the depth of the portion of that archaeological feature in this location. However, underground parking below the History Center would have the potential to affect F:1 El Presidio and F:20 Stream Ravine Dump. If the depth of excavation for the History Center and its underground parking would extend into these two contributing archaeological features ,then the area and number of impacts would increase and be roughly equal to Alternatives 1 and 2.

Circulation Under this alternative, the closure of Moraga Avenue between Arguello and Mesa streets and the closure of Graham Street between Moraga and Sheridan avenues would reestablish the historical connection, unencumbered by traffic, between the Officers' Club (along the southern façade of El Presidio) and Pershing Square (along the western façade of El Presidio) with the rest of the *plaza de armas*. This alternative would enable important archaeological investigations to occur within current street corridors and reestablish this area as an historic open space.

Parking As proposed under this alternative, relocation of parking away from El Presidio would be beneficial to the long-term management, research, and public interpretation goals for the site. The historic open space would be rehabilitated in a manner that would revitalize and commemorate El Presidio's history.

Alternative 4

No additional building demolition or new construction is proposed under this alternative. Direct effects on archaeological resources would be limited to ground-disturbing activities resulting from routine maintenance and ongoing operation of buildings, grounds, roads and parking areas, utilities, and other existing facilities. Under the terms of Stipulation VII, Assessment of Effects, of the 2002 PA (Presidio Trust 2002), these undertakings would be considered repetitive and low-impact in nature and would have minimal or low potential to affect archaeological resources. Therefore, no known or previously unidentified archaeological resources are likely to be affected.

MITIGATION MEASURES

Mitigation measures remedy or offset adverse effects or changes in a resource's qualifying characteristics so as not to diminish its integrity. The following measures adapted from the final PTMP EIS would be implemented to avoid potentially significant impacts. These measures have been further developed during ongoing Section 106 consultation and incorporated in a Programmatic Agreement for the Main Post Update

[56] *The effects of underground parking at the proposed lodge site are assessed as part of the lodge analysis.*

(PA-MPU) (Appendix B). The measures that follow should be viewed as recommendations based on the types of resources that would be affected and Section 106 Archaeology Guidance issued by the ACHP. Implementation of these measures and other measures stipulated in the PA-MPU would reduce potentially significant impacts to archaeological resources.

AR-1 *Avoidance and Minimization* The Trust will take all reasonable measures to protect archaeological sites and features identified inside the NHLD. To accomplish this and inform the design process, an Archaeological Management Assessment (AMA) will be prepared for individual construction projects or groups of related projects by a qualified archaeologist prior to the completion of schematic design. Avoidance and minimization of adverse effects through the continuing design phases is the preferred outcome. Direct effects on archaeological resources that contribute to the NHLD or are eligible for the NRHP will be avoided and/or minimized to the extent possible through negotiation with project proponents, the Trust's Federal Preservation Officer, and the Trust's Principal Archaeologist. The AMA will outline a course of action for the projects where significant archaeological sites could not be avoided, employing one or several of the mitigation measures below, and the stipulations of the PA-MPU.

AR-2 *Archaeological Identification Plan(s)* A project-specific plan will be developed at the completion of the schematic phase for projects anticipated to have an adverse effect but that require further identification to understand the content and dimensions of the features, to assess the nature and extent of the effect, and/or to guide continuing efforts to avoid or minimize the adverse effect. For archaeological features identified the Trust may assume eligibility. Identification will further refine recommendations in the AMA and may lead to a monitoring or treatment plan.

AR-3 *Archaeological Monitoring Plan(s)* A project-specific plan will be developed for those projects that are not anticipated to have an adverse effect, or that have been designed to avoid adverse effect during design development but that nonetheless are within proximity to identified or predicted archaeological features. The monitoring plan will describe measures to protect archaeological features and will include the proposed location and frequency of monitoring along with required documentation procedures. Measures to identify, assess, and determine the appropriate treatment of archeological features should they be encountered during monitoring will be consistent with the discovery protocols, below.

AR-4 *Archaeological Research Design* If archaeological resources cannot be avoided, the Trust will review the Archaeological Research Design for El Presidio and the Main Post (Revelar) to assess its completeness and appropriateness before proceeding with other mitigation measures, such as data recovery, for specific projects. Site-specific information and detail may need to be added. If it is determined that a project will likely disturb prehistoric sites, another research design will need to be drafted for those resources.

AR-5 *Archaeological Treatment Plan(s) and Data Recovery* If an archaeological site or feature cannot be avoided and preserved in place during construction, a treatment plan including data recovery will be developed and implemented in order to preserve important information that would otherwise be lost. A project-specific plan will be developed for those projects that have unavoidable adverse effects and where existing identification is sufficient to proceed to treatment, or for which

further identification is incorporated within the treatment plan. Data recovery and analysis will be accomplished in a thorough, efficient manner, using the most cost-effective techniques practicable. The plan will describe protection measures for unaffected archaeological features, methods for data recovery, relevant research questions to be answered, monitoring during construction, responsibilities and coordination, curation, and the interpretation of recovered information in a manner that it is understandable and accessible to the public. The plan will describe the mitigation sufficiently to serve as a scope of work and for the purpose of developing a budget. Treatment plans will be reviewed according to terms set forth in the PA-MPU.

AR-6 *Creative Mitigation* This measure will be considered in combination with data recovery to derive greater public benefits from the information extracted through data recovery. Examples of creative combinations with data recovery may include:

- Using a portion of the resources expended on mitigation to fund fellowships or competitive grants for local universities for scholarly research projects that would further the public knowledge about the Presidio's history and past cultures represented in the archaeological data recovered and in similar collections or features as those affected, and to provide this information to the archaeological education program for use in school curriculum.
- Using a portion of the resources expended on mitigation to enhance and interpret those portions of the Main Post landscape not affected by new construction; undertaking multilingual public interpretation to reach a broad audience of visitors.
- Using a portion of the resources expended on mitigation to develop, host, and maintain a website that would serve as a clearinghouse for archaeological publications, scholarly reports, videos, interpretive materials, interactive games, and other educational media that could be used in schools and otherwise would not be produced or distributed to the public.

AR- 7 *Discovery Protocols* A standard response protocol will be developed by the Trust for all projects in the event of a discovery. For projects without any anticipated effects, this will be the only condition required prior to implementation. In the event of a discovery the Trust may assume eligibility for the purposes of treatment. Should circumstances arise where the Trust cannot address discoveries in a manner consistent with the protocol, the Trust will notify the SHPO of the discovery and any project-related time constraints, then agree upon reasonable time frames for consultation. The Trust will take into account any timely comments prior to making a final decision on treatment. This protocol will describe the Trust's methods to comply with the Archaeological Resources Protection Act and Native American Graves Protection and Repatriation Act (NAGPRA).

AR-8 *Curation of Archaeological Collections* All records associated with excavations and all excavated materials not subject to the NAGPRA that are deemed important for preservation will be accessioned, catalogued, and managed in accordance with applicable field and laboratory manuals for the undertakings, and 36 CFR Part 79, Curation of Federally-Owned and Administered Collections.

REFERENCES

Jones & Stokes. 2002. *Draft Archaeological Treatment Plan, South Access to Doyle Drive Project, San Francisco, San Francisco County.* Report prepared for Parsons Brinkerhoff.

Kaijankoski, Philip. 2008. *Subsurface Geoarchaeological Investigations for the Proposed Presidio Contemporary Art Museum, Presidio Main Post Project, San Francisco, California.* Prepared for the Presidio Trust Archaeological Laboratory, San Francisco, California. Prepared by Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Letter Report. Dated April 28.

Meyer, Michael D. 2008. *Presidio Lodge Archaeological Test Trenching.* Prepared for the Presidio Trust Archaeological Laboratory, San Francisco, California. Prepared by Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Letter Report. Dated May 8.

Milliken, Randall, Laurence H. Shoup, and Beverly R. Ortiz. 2007. *Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today*. Draft report submitted to National Park Service, Golden Gate National Recreation Area.

National Park Service (NPS). 1993. *1993 Update to the National Register of Historic Places Registration Forms for the NHLD.* Golden Gate National Recreation Area, California. Dated October.

Page & Turnbull, Inc. 2008. *2008 National Historic Landmark District Update, Presidio of San Francisco, San Francisco, California.* Draft. Prepared for the Presidio Trust. Dated June 27.

Adrian Praetzellis, Ph.D., et. al. 2008. *Revelar: An Archaeological Research Design for El Presidio and the Main Post.* Dated June.

Presidio Trust. 2002. *Programmatic Agreement Among the Presidio Trust, National Park Service, The Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Regarding the Presidio Trust Implementation Plan and Various Operation and Maintenance Activities for Area B of the Presidio of San Francisco, Golden Gate National Recreation Area*.

_____. 2010. *Programmatic Agreement Among the Presidio Trust, the Californian State Historic Preservation Officer, the National Park Service, and the Advisory Council on Historic Preservation, for the Main Post Update to the Presidio Trust Management Plan, Presidio of San Francisco National Historic Landmark, San Francisco, CA.*

Presidio Trust and NPS. 2004. *Levantar: The Presidio of San Francisco Archaeological Management Strategy.* Draft. Dated May.

Reese, Elena, John Holson, and Lisa Holm. 2008. *Archival Research Report for Presidio Main Post Supplemental EIR/EIS Project, Presidio of San Francisco, California*. Prepared for the Presidio Trust Archaeological Laboratory, San Francisco, California. Prepared by Pacific Legacy, Berkeley, California. Dated July.

Voss, Barbara. 1999. *Archaeological Shovel Probe Survey at the Presidio of San Francisco, 1997-1998.* Prepared for the National Park Service, Golden Gate National Recreation Area, San Francisco, California. Prepared by Archaeological Research Facility, University of California, Berkeley, Berkeley, California.

_____. 2002. *The Archaeology of El Presidio de San Francisco: Culture Contact, Gender, and Ethnicity in a Spanish-Colonial Military Community.* PhD dissertation, Department of Anthropology, University of California, Berkeley.

3.8 Visua1 Resources

AFFECTED ENVIRONMENT

In describing the visual resources at the Main Post, it is useful to discuss visual character and views. Visual character is influenced by topography, vegetation, and buildings as well as patterns created by building ensembles, designed landscapes, and open spaces. These elements work to convey the sense of place in a visual context. Views at the Presidio have high scenic value, with recognized visual appeal including scenes of landforms, trees, water, and groups of buildings. Many people visit the Presidio simply to enjoy its scenic views of its forests and buildings, and San Francisco Bay.

Visual Character

The visual character of the Main Post is complex, resulting from a highly ordered physical layout consisting of a wide range of building types and styles surrounding three significant, but visually degraded, open spaces. The Main Post is the most visually diverse of the Presidio's districts, containing both the oldest building on the Presidio (parts of the Officers' Club are remnants of the original El Presidio) and the newest (the transit center, constructed by the Trust in 2006).

While most districts at the Presidio feature unified buildings and styles, the Main Post has a wide variety of architectural styles and building types, constructed from adobe, brick, wood frame, and concrete. Of the nine prevalent architectural styles at the Presidio (Baron 1998), eight are represented at the Main Post: Victorian, Greek Revival, Italianate, Colonial Revival, Mediterranean Revival, Spanish Colonial Revival, World War II Era, and Post-War/Modern and Utilitarian. While the buildings reflect a succession of stylistic effects popular during the various periods of military post construction, the architecture is unified by the military's basic and straightforward approach to construction and design. This approach generally tends toward formal symmetry and eschews excessive ornamentation (NPS 1993).

Unlike many military posts, the Main Post has three parade grounds rather than one: El Presidio, the Civil-War-era or "Old" Parade, and the Main Parade. The Old Parade remains a landscaped open space, as it was originally, although its size has been reduced. El Presidio and the Main Parade, on the other hand, have both been converted from parade grounds into parking lots. The Main Parade today consists of seven acres of asphalt paving, with 700 parking spaces. Buildings 39, 40, and 41 intrude onto the quadrangle of El Presidio which was the original *plaza de armas* created by the Spanish.

The Main Post has a very strong organizing geometry. This geometric layout organizes the physical environment and provides a sense of order to the place, which stands in strong contrast to the Presidio's natural landscape, forests, and rolling topography. A visitor entering the Main Post via the Presidio's curving network of roads would immediately perceive the contrast.

In its most basic form, the Main Post consists of multiple rows of buildings that frame two central, side-by-side open spaces with one row

of buildings running down the middle. There are three visually dominant building ensembles that reinforce the Main Post's north-south orientation. These are the Montgomery Street Barracks; Buildings 35, 38, and 39 lining Keyes Street; and the upper Funston Avenue Officers' Quarters. These ensembles consist of a repetition of buildings of similar appearance lined in a row. A fourth building ensemble of low-scale barracks that once lined Graham Street separating the Main Parade from the Old Parade was mostly demolished by the U.S. Army in the 1950s. The Main Post's principal open spaces are situated between the three parallel rows of building ensembles with smaller buildings filling in the edges in the east-west direction. Together, the building ensembles and open spaces establish the spatial structure and formal layout of the Main Post, which in turn greatly determine its distinct visual character.

Views

Scenic Views From the northern part of the Main Post, expansive views include San Francisco Bay, Alcatraz Island, Angel Island, glimpses of the Marin Headlands, and the Golden Gate Bridge. To the south of the Main Post, the highest forested ridge of the Presidio rises above the skyline of military buildings, forming a green and naturalistic framework that embraces the whole scene. The simultaneous awareness of a strong human-made environment in juxtaposition to a dramatic natural setting creates a visual environment with recognized scenic values.

At the northern part of the Main Parade, bay views are panoramic and dominate the setting. From about 150 feet south of Building 210, the bay and Angel Island seem close at hand. Blue water is visible between Buildings 105 and 106, while the Golden Gate Bridge towers rise up behind them. At the southern end of the Main Post, bay views change from panoramic to linear; that is, they are distant and bracketed by buildings. They become long views, usually at the end of north-south roads. From the Officers' Club, a glimpse of the bay occurs between buildings with a long foreground of lawn and asphalt parking lot.

Internal Views In the southern part of the Main Parade, the bay figures less prominently into the visual setting. Views are more internal and are largely comprised of buildings. Open expanses within the Main Post district make it is easy to see from one area to another. The seven-acre parking lot that currently occupies the Main Parade is the most prominent feature. The Montgomery Street Barracks, with its row of five large, identical brick buildings, creates a visual unity that is perceived more as a single block than as individual buildings. It provides a commanding streetscape that is more than 1,200 feet long and is visible from both north and south directions. Views in the east-west direction visually connect the barracks to Buildings 38 and 39. Important objects, such as the flagpole, can be viewed from many locations within the Main Post. The Officers' Club holds a commanding position at the south end of the Main Post. It is the tallest building on the skyline. From it, linear views to the bay are possible, as are diagonal views to the Montgomery Street Barracks. The upper Funston Avenue Officers' Quarters create another prominent streetscape viewed internally as a linear corridor defined by buildings on the west side and a wall of trees on the east side.

The location for El Presidio was chosen for its commanding presence overlooking the bay. Today, what remains is a linear view down Graham Street that offers limited bay views framed by buildings and a view to the northwest from El Presidio across the Main Parade to the bay. Another important view is from Crissy Field and the water's edge to the Main Post. Finally, the view north from Halleck Street to the bay terminates

where the Presidio's wharf once stood. Both of these views remain mostly intact, although they are compromised by Doyle Drive.

ENVIRONMENTAL CONSEQUENCES

Methodology

The potential impacts of the alternatives on visual resources were assessed through an analysis of both existing and anticipated future conditions. The analysis considered the visual setting including the visual character of the Main Post, its buildings and open spaces, and the nature and makeup of present and historic views both to and from the Main Post. It then examined how visual character and views would be changed or otherwise affected by the actions that would occur under each alternative, and how those changes or effects compare to specific criteria established for determining visual impacts. This effort was assisted by treatment recommendations based on an analysis of the visual character, organization, and character-defining features of the district as described in the 2002 Cultural Landscape Assessment of the Main Post (SMWM, et al. 2002).

Field Studies Field observations of the Main Post and specific areas where actions would be implemented under each alternative were made. An inventory was developed consisting of existing landscape components, visual character, land uses, activities, patterns of movement through the Main Post, and viewing conditions. Significant views and open spaces were documented in site diagrams. Locations in the Presidio that could be affected by the alternatives were identified. These locations were marked on a base map and visited for the purpose of making direct observations of conditions. Photographs from each viewpoint were taken for reference and held as candidate baseline images for use in preparing photo simulations of the various proposals. Numerous viewpoints were visited and photographed.

Visual Simulations Visual simulations depicting the appearance of the alternatives in views from representative points open to public access within the Main Post were prepared. Figure 22 shows the viewpoints the visual simulations are taken from. Information used to prepare the visual simulations was supplied by the proponents of the various projects considered under the alternatives. Preparation of the visual simulations included creating digital 3D models of proposed buildings from engineering and architectural information. Two types of visual simulations were used: photorealistic digital models with photographic backgrounds, and computer-generated 3D drawings. In the case of the photorealistic simulations, an overall digital 3D model was created, which included the existing terrain and proposed building pads and a series of existing landmarks (buildings, trees, etc.). Using those landmarks as guides, the 3D model was then aligned with the respective digitized photographic images. In both types of simulation, basic forms and colors representing the proposed building materials, along with light and shade, were applied to the modeled buildings.

The visual simulations prepared for this analysis have been reviewed by the Trust and the project proponents and have been determined to be accurate. The result is a set of images that depict the Main Post's future appearance within the limitations of the information available at the time the images were prepared. They are not meant to convey the life-like appearance of a completed building design, but rather to provide basic information about building height, massing, and location. They are an accurate and objective means of depicting the future appearance of the district and identifying the changes in visual conditions that would result.

Criteria With the aid of the visual simulations, the alternatives were reviewed to determine whether they would:

- Disrupt the Main Post's geometric order established by the road network and the layout of buildings and open space
- Address the degraded visual character of El Presidio
- Be compatible with the existing historic setting
- Block or disrupt important panoramic views to the bay from the northern portion of the Main Post
- Block or disrupt important linear or otherwise scenic views to the bay from the southern portion of the Main Post

Alternative 1

This alternative would increase built space on the Main Post by 66,500 square feet. New construction would include a 50,000-square-foot office building at the Graham Street infill site, an 18,000-square-foot addition to the Presidio Theatre, and a 4,000-square-foot addition to the Presidio Chapel. A 500-square-foot addition between two historic garages would also be constructed and Building 46 would be removed to provide a secure entrance for the archaeology lab and curation facilities. A Heritage Center would be located in Building 2, and Building 42 would also be rehabilitated to accommodate lodging.

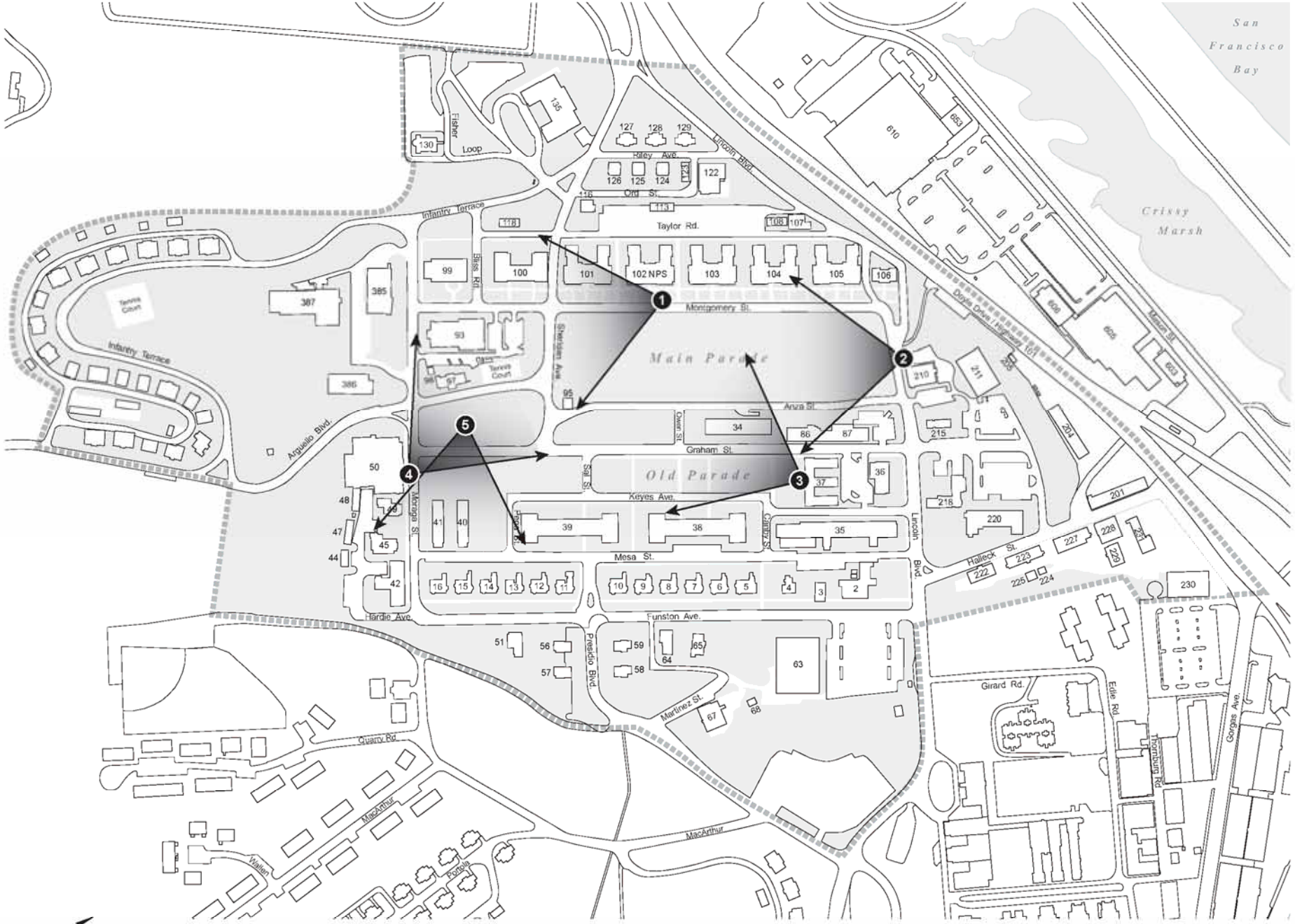
Heritage Center (Building 2) Some non-historic portions of the building would be removed, and overall the historic structure would be rehabilitated to enhance its historic character. No change in visual character would result because very few of the expected building modifications would be visible outside the building, and the impact on Main Post views would be unnoticeable.

Archaeology Lab and Curation Facilities Visible changes resulting from the proposed archaeology lab and curation facilities would entail removing Building 46, a small shed situated between Buildings 47 and 48, and replacing it with a 500-square-foot connector building that would link the two garages. This small structure would be very transparent due to its glass walls. An outdoor work area would be created in the existing paved area. Changes would not be visible from El Presidio or the other key Main Post open spaces and would have no impact on Main Post views.

El Presidio Under this alternative, the visual character of El Presidio would be marginally improved by replacing existing asphalt paving with more visually compatible surface materials.

Lodging (Pershing Hall) Very few exterior changes to accommodate lodging would occur, except for the possible removal of the non-historic metal fire escape on the building's front elevation. This alteration, along with any other minor exterior changes that might occur, would improve the appearance of Building 42.

Office As seen in Figure 23, the office building at the Graham Street infill site would strengthen the spatial separation between the Main Parade and Old Parade and would help differentiate the two open spaces (SMWM, et al. 2002). The office building would help establish a continuous "street wall" on Graham Street, aligning with Buildings 86 and 87, although Building 34 would not align with either. The office building would have a similar mass and scale as Buildings 35, 38, and 39, would help define the west side of the Old Parade, and would have a positive effect on the visual setting of the Old Parade. In addition, the



Source: Presidio Trust 2010

Source: Square One Productions 2010

building would not compete with the dominant visual position of the Officers' Club, which is at a higher elevation.

Figure 24 shows the view from the northern edge of the Main Parade, with the new building visible south of Building 34. From this vantage point, the building would appear as a compatibly scaled continuation of the existing row of buildings framing the eastern edge of the parade ground. The Main Parade lawn coupled with the Montgomery Street Barracks would form a strong spatial and visual unity, which would become a focus of the visual setting. Figure 25 shows that the office building would be visible from the Officers' Club and that its southernmost portion would block a small portion of the bay view. However, its impacts on the overall panoramic view would not be extensive enough to create an adverse impact. The building would not affect the linear view south down Graham Street from the Officers' Club or views to the Main Post from Crissy Field or from the bay. However, the building would block internal views in the east-west direction, such as the view from inside the Montgomery Street Barracks toward the east, or the view when standing in front of Building 39 looking west. Some visual relief would be provided because the volume of the new office building would be broken into two parts, of different heights. By retaining Owen Street, this alternative would provide a valuable east/west view corridor. In the view shown in Figure 26, the building would not be visible and would not adversely affect views toward Pershing Square or the Officers' Club beyond.

Presidio Theatre The 18,000-square-foot addition would be added west of the existing Presidio Theatre on an area that is currently an open lawn. The addition would be scaled and detailed to relate closely to the existing building. Its height would not exceed the existing building's eave line and its colors and materials would be similar to the existing theater. The addition would not affect the visual character of the nearby Montgomery Street Barracks, but would impact the visual character of the western end of Moraga Street. Due to its location on the open lawn west of the theater, the addition would reduce open space and obscure the theater's west wall. However, a transparent connector structure would separate the new addition from the existing theater so that the original volume of the building would be protected and the new construction would be visually separated from the original theater. The addition would have expanses of blank walls, as is evident in Figure 27. However, the volume of the new addition would be broken down through the visual separation from the existing theater, and use of transparent materials and scale-giving articulation at the entry. Because the entry to the new addition would face Moraga Avenue like the historic theater's entrance, it would reinforce the importance of the Moraga Avenue elevation. New construction would add to the extensive variety of architectural styles, building sizes, and construction types found within the district and would not create a negative impact on the visual character.

As seen in Figure 27, the theater addition would be visible mostly from its immediate surroundings and would affect localized views only. It would not be visible from the majority of the Main Parade, or block important views. However, it would block a linear view from Moraga Street toward the bay that is currently available from the open lawn west of the theater. Loss of this localized and non-linear view to the bay would not be significant due to the view's less than prominent role in the Main Post's visual setting, and Taylor Road's character as the "back edge" to the Montgomery Street Barracks (SMWM, et al. 2002).

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: BAR Architects 2010

Presidio Chapel The addition to the Presidio Chapel would not affect the visual character of the Main Parade, El Presidio, or Pershing Square. Because it would be located on the west side of and set back from the existing building, the addition would have minimal visual impacts on the chapel's immediate surroundings. Figure 28 shows that the addition would be located in such a way to minimize its impacts on the chapel's main architectural features, would not detract from the building's historic entrance orientation, and would leave a large portion of the chapel's west elevation unobscured by new construction.

Alternative 2

This alternative would increase built space on the Main Post by 52,500 square feet. New construction would include the Presidio Lodge at the Graham Street infill site and the additions to the Presidio Theatre and Presidio Chapel. The alternative would also provide for a Heritage Center in the Officers' Club (Building 50) and rehabilitation of Building 42 to accommodate lodging.

Heritage Center (Building 50) The Heritage Center in the Officers' Club would remove some non-historic portions of the building. Overall, the historic structure would be rehabilitated to enhance its historic character. Very few of the expected building changes would affect the exterior or be visible outside the building, resulting in minimal change to the Main Post's visual character.

Archaeology Lab and Curation Facilities Impacts would be the same as described for Alternative 1.

El Presidio Removing Buildings 40 and 41 would provide a larger and more contiguous open space to represent the original Spanish *plaza de armas*. As shown in Figure 29, this alternative would create a site with clearly visible boundaries on the ground plane and improved internal views toward Pershing Hall, Funston Avenue, and Pershing Square. These enhancements would improve the visual character of the proposed open space. Removal of Buildings 40 and 41 would reveal some panoramic views from the east side of the El Presidio site toward the Montgomery Street Barracks that are currently blocked. The view from Pershing Square toward the Officers' Club, Pershing Hall, and the Funston Avenue Officers' Quarters would be improved, allowing east-west views that promote an understanding of the original spatial relationships that existed around El Presidio prior to World War II.

Lodge The Presidio Lodge would improve the visual setting by replacing Building 34, a nondescript building with a flat roof and concrete block walls, with ungainly horizontal proportions that are visually jarring in juxtaposition to nearby historic buildings. The new lodge would consist of two parallel rows of small-scale buildings. Between the two parallel rows of lodge buildings, an open space would connect all the rooms. Second-story balconies and bridges would link the upstairs rooms. These buildings would be rectangular forms with pitched roofs and materials similar to and compatible with other Main Post buildings. As shown in Figure 30, the massing and scale of the proposed lodge would create a stronger visual relationship with the historic surroundings than Building 34 does. The size of new construction for the lodge would be equal to the total square footage of Building 35, which is approximately 70,000 square feet. Because this square footage would be distributed among a number of individual two-story buildings, the visual impact would be much less imposing than Buildings 35, 38, or 39. The lodge buildings would create a spatial separation between the Main Parade and the Old

Source: Page & Turnbull 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Parade and would provide a built edge to both parade grounds, helping to visually define the boundaries of the two open spaces (SMWM, et al. 2002). Unlike the office building at the site in Alternative 1, the lodge would be roughly based on the historic barracks layout and provide a strong visual unity with Buildings 86 and 87.

As shown in Figure 30, the lodge would be broken into at a number of small, narrow volumes facing Graham Street, each of which would be substantially shorter than the length of Buildings 86 or 87. The individual lodge buildings would be about 40 feet wide, varying in length from 80 feet to 120 feet, and would be separated by gaps ranging from 10 to 20 feet. The southern-most lodge building would be set back at least 150 feet from the historic powder magazine. This setback would lessen its visual impact on the powder magazine and provide more open space at the south end of the site. At a maximum height of 30 feet above grade, the lodge would be taller than the flat-roofed building it replaces (Building 34), but shorter than Building 86, which is approximately 45 feet at its highest point. It would also be shorter than the maximum height of Buildings 35, 38, and 39, thereby creating an appropriate visual presence. At this height, the proposed lodge would not compete with the dominant visual position of the Officers' Club, which is currently a focal point at the southern edge of the Old Parade.

Figure 31 shows the lodge and the rehabilitated Main Parade. Viewed from this vantage point, the Main Parade lawn coupled with the Montgomery Street Barracks would form a strong spatial and visual unity that would prevent the lodge from dominating the visual setting. In this view, the two new, one-story buildings behind Buildings 86 and 87 would be clearly visible. However, due to their height (limited to 15 feet), and the gap between these two buildings (approximately 20 feet), the buildings partially obscure but would not completely block views of Buildings 86 and 87 from the Main Parade. The buildings would block views out from the first floor (but not the second floor) windows of 86 and 87 toward the Montgomery Street Barracks and toward the bay, which would be considered a localized impact on these office buildings. In the view shown in Figure 32, the lodge would not be visible and would not adversely affect views toward Pershing Square or the Officers' Club beyond. As shown in Figure 33, compared to the office building in Alternative 1, the lodge would block fewer of the bay views from the Officers' Club because the lodge would consist of smaller buildings that are lower in height. The linear view south that currently exists down Graham Street would not be affected by the lodge. The lodge would affect some short-range, east-west internal views at the Main Post. However, because the lodge would consist of a number of separate buildings with open space between them, Alternative 2 would maintain internal views between the Old Parade and the Main Parade that would be blocked in Alternative 1. The lodge would block the view of some Montgomery Street Barracks from a street-level vantage point near Building 39 because the area south of Owen Street is currently an open lawn.

Presidio Bowling Center (Building 93) Changes to the Presidio Bowling Center would involve interior building modifications and would have little impact on visual character or views. This is shown in Figure 32.

Presidio Theatre and Presidio Chapel Impacts would be the same as described for Alternative 1.

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Alternative 3

This alternative would increase built space on the Main Post for the 48,000-square-foot History Center at the site south of the Main Parade, currently occupied by the Presidio Bowling Center. Unlike Alternatives 1 or 2, it would create the archeology lab and curation facilities without demolishing Building 46 or adding new construction. It would commemorate El Presidio by eliminating parking from the site and would remove Buildings 40 and 41. It would also rehabilitate Building 42 and the Funston Avenue Officers' Quarters to accommodate lodging.

History Center Figure 34 shows the view of the History Center and the rehabilitated Main Parade from the northern edge of the parade ground. While the History Center would be clearly visible from this vantage point, the Montgomery Street Barracks would appear more visually prominent than the History Center. From this vantage point, the History Center would not block views of the Infantry Terrace residences and would not obscure the planted ridge of Presidio Hill. Figure 35 shows the History Center from the front of Building 102, the middle barrack on Montgomery Street. From this vantage point, which encompasses approximately the southern third of the Main Parade, the History Center would block views south of some of the Infantry Terrace residences but would not interrupt the defining edge of the ridgeline. Because the History Center would be taller than the existing Presidio Bowling Center and occupy more space, the building would be more visually prominent than the Bowling Center from the closer vantage point shown in Figure 35. The building would create a strong southern edge to the Main Parade, but similar to the Bowling Center, this would not be considered detrimental to the visual character of the Main Post. The History Center would also be in keeping with the postmodern architecture that was introduced at the Presidio in the late 1980s. As shown in Figure 36 however, it would introduce large and very visible expanses of blank wall into the visual setting, which would be out of character with the scale and detail of the historic architecture of the Main Post and would thus create an adverse impact on the visual character of the Main Post. Mitigation Measure VR-1 would be applied to the History Center to avoid this adverse impact.

The History Center would not affect views from the Officers' Club to the bay, as shown in Figure 36. It would, however, block the view of Building 100 and the top portion of the Golden Gate Bridge's south tower, which is currently visible above Building 100. This is because the new building would be taller than the existing Bowling Center. It would also block internal east-west views from the area south of the Main Parade, creating an adverse impact on important views. Because it would be much taller than historic Building 97 and sit so close to it, the new building would diminish the historic setting of Building 97, thus creating an adverse impact on the visual character. Mitigation Measure VR-2 would be applied to the design to limit building height in order to avoid this adverse impact.

El Presidio Impacts would be similar to those described for Alternative 2, except the visual setting would be further improved by the removal of all parking.

Lodging (Pershing Hall and the Funston Officers' Quarters) Very few exterior changes to accommodate lodging would occur. Any minor exterior changes that might occur would generally improve the appearance of the buildings.

Source: Square One Productions 2010

Source: Square One Productions 2010

Source: Square One Productions 2010

Presidio Theatre and Presidio Chapel Alternative 3 would not include additions to these buildings, and therefore would not create any changes to the visual setting.

Alternative 4

This alternative would not increase built space on the Main Post. The geometric order of the Main Post would be preserved, since no changes would occur that could affect the existing street system or grid, strengthen the separation between the Old Parade and the Main Parade, or reintroduce the Graham Street street wall. No actions would be taken to enhance or improve the appearance of El Presidio; thus the degraded visual character of the quadrangle would remain under this alternative.

MITIGATION MEASURES

The final PTMP EIS did not include mitigation specific to visual resource impacts. The following site-specific mitigation would be implemented under Alternative 3 to reduce impacts on visual resources.

VR-1 *South of the Main Parade Site (new)* To avoid having the east and west elevations of the History Center (Alternative 3) appear monolithic and hence visually out-of-scale with the surrounding historic architecture, and to avoid blocking views of the Montgomery Street Barracks, Design Guidelines will be developed for the south of Main Parade site in order to modulate the long expanses of solid wall, subdivide the massing, and provide scale-giving architectural elements.

VR-2 *Height Limits on New Construction (new)* To avoid having the History Center (Alternative 3) block internal Main Post views, Design Guidelines will establish height limits on new construction.

REFERENCES

Baron, Kristin L. 1998. *The Presidio of San Francisco: An Architectural History.* United States Department of the Interior, National Park Service, Golden Gate National Recreation Area. Dated November.

National Park Service (NPS). 1993. *Presidio National Register of Historic Places Registration Forms, Golden Gate National Recreation Area, California.* Page 7-5. Dated October.

SMWM, Presidio Trust, National Park Service, and the Office of Cheryl Barton. 2002. *Principles for the Future: A Cultural Landscape Assessment of the Main Post.*

3.9 Visitation

AFFECTED ENVIRONMENT

Visitor Experience

Today, the daily population of the Main Post is significantly smaller than it was when the Presidio was a U.S. Army post. Although most of the building space has been inhabited, there is a dearth of activity and few services to welcome the public. A visitor to the Main Post would not recognize it as the heart of a national park site, nor would a visitor perceive the historic significance of the area.

The visitor experience as described in the PTMP provided for more amenities and activities for both the park community and visitors. The PTMP described the Main Post as the "heart of the park" and a visitor destination.

Visitor Information

Visitor information, orientation, and amenities at the Main Post are currently limited, and most first-time visitors and tourists are unaware that any support services are available. The NPS Visitor Center, which is located temporarily inside the Officers' Club (Building 50), is the main contact point for visitors to the Main Post. The Officers' Club serves as a primary staging area for tours and a variety of publications and maps are available in the bookstore. The Officers' Club is also used for changing exhibits, performances, lectures, and other special events.

Other visitor contact sites at the Main Post provide printed information, such as park brochures, maps, and other publications, to visitors. These sites include the Trust Headquarters (Building 34) and the transit center, which provides public restrooms and a restaurant. The transit center also includes an orientation and wayfinding kiosk that contains information about transit, hiking and bicycling routes, points of interest, and noteworthy attractions. Some leased buildings have display areas where current events, transit information, and interpretive information are available to visitors.

Visitor Facilities

The Main Post's Old Parade and Pershing Square offer capacity for picnics and leisure. The area is also used for a range of special events including performances, concerts, festivals, and other cultural events. Pershing Square, located southeast of the Main Parade, hosts historic ceremonial events. The Main Parade is currently the largest parking facility on the park.

The Golden Gate Club (Building 135) is the Presidio's largest special event facility. It accommodates cultural events, training classes, workshops, meetings, weddings, and receptions in its three ballrooms and seven dedicated meeting rooms.

The Presidio Chapel (Building 130) provides a venue for a variety of cultural events. A growing music program, interfaith ceremonies, and

other cultural events are held regularly at the chapel, sponsored by the Interfaith Center.

The former Chapel of Our Lady (Building 49) provides a venue for small community meetings, weddings, and lectures.

The Herbst International Exhibition Hall (Building 385) is a freestanding building with 6,800 square feet of exhibition space. In addition to periodic exhibitions, it accommodates meetings and other special events.

Visitor Services

Overnight lodging for the general public is not available at the Main Post. However, Building 41 is a dormitory for participants in internship and volunteer programs. Building 51 is used as a guest house for consultants and participants in special events at the Presidio.

Four small food service facilities offer dining options at the Main Post. These include a breakfast and lunch café (Dish Café in Building 39), a museum café (at the Walt Disney Family Museum), a grill (in the Presidio Bowling Center), and a French brasserie (La Terrasse in the transit center).

Visitation

Although visitation is difficult to estimate for the Presidio, it is estimated that approximately 650,000 visitors come to the Main Post annually (see Table 26). Visitors come to the Main Post principally for exhibitions and special events (e.g., Shakespeare in the Park, Film in the Fog, and the Aloha Festival). More than half of the visitor use is associated with the Presidio Community YMCA Fitness Center and the Presidio Bowling Center.

26 ANNUAL VISITATION TO THE MAIN POST (THOUSANDS)

	Existing Conditions	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
CULTURAL USES					
Public Use (Building 93)	0	0	15-25	0	0
History Center[1]	0	0	0	150	0
Heritage Center / Visitor Center	0	110-150	240-290	40-70	40-70
Archaeology Center	0	15	15	15	0
Walt Disney Family Museum[2]	0	300-350	300-350	300-350	300-350
Presidio Theatre	0	145	145	110	110
International Center to End Violence[3]	0	5	5	5	5
Other Cultural Uses[4]	37-62	48-81	76-127	37-62	37-62

	Existing Conditions	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
RECREATIONAL USES					
Presidio Community YMCA Fitness Center[5]	293	293	293	293	293
Presidio Bowling Center[6]	90	90	0	0	90
Main Post Tennis Court[7]	6	6	6	0	6
Main Post Ballfield	0	0	15-20	0	0
OTHER USES					
Programmed Uses (Main Post Buildings)[8]	175-200	200-250	200-250	200-250	175-200
Programmed Uses (Main Post Open Space)[9]	50	100-150	100-150	100-150	100-150
Lodge[10]	0	13	76	34	0
Restaurant / Retail Uses[11]	55-58	297-303	198-231	150-155	150-155
TOTAL ANNUAL VISITORS[12]	**600-645**	**1,380-1,570**	**1,430-1,690**	**1,220-1,400**	**1,110-1,270**

[1] *Alternative 3 only. Source: Presidio Historical Association n.d.*
[2] *Source: Bloomberg 2008.*
[3] *Source: Family Violence Prevention Fund 2004.*
[4] *Includes ground floor of Building 102 (Area A), Buildings 385 and 386, portions of Buildings 101 and 105, and incidental new construction.*
[5] *Source: Presidio Community YMCA 2008.*
[6] *Source: Presidio Bowling Center 2008.*
[7] *Source: Presidio Community YMCA 2008.*
[8] *Includes exhibitions and events in Golden Gate Club, Officers' Club, chapels, and San Francisco Film Centre.*
[9] *Includes existing events on Old Parade and Main Parade (e.g., Shakespeare in the Park, Aloha Festival) and anticipated growth in the number of comparable events per year.*
[10] *Source: Larkspur Hotels & Restaurants 2007. Estimated hotel guests are based on the hotel guest component of the Larkspur proposal.*
[11] *Includes transit center restaurant, Main Parade restaurant or café, portions of remaining Montgomery Street Barracks, east Halleck buildings and Building 210 (bank and post office). Approximately 20 percent of restaurant and retail patrons are assumed to be independent visitors Annual visitation is derived from daily trip generation rates for retail and restaurant uses; for restaurant uses, estimated annual visitation is adjusted based on existing restaurants in the Presidio.*
[12] *Assumes 15-percent reduction to reflect independent visitors.*

ENVIRONMENTAL CONSEQUENCES

Methodology

For this section, visitation was projected based on information provided by current and prospective tenants for both existing and anticipated uses, including building space and open space. Estimates for unidentified or general cultural uses, restaurants, and retail building uses were derived from the trip generation rates used in the draft SEIS transportation model. For these general cultural uses, restaurants, and retail uses, City and County of San Francisco guidelines (CCSF 2000) were used to help identify visitor generation percentages of total trips. These factors were then combined to predict future daily visitation. The factors used to convert daily visitor trips to annual visitation vary with the type of land use. For general restaurant uses, information from existing Presidio restaurants was used to convert daily visitors to annual visitation. The mix of land uses yields the total estimated visitation.[57] Visitation estimates also include visitors to current community services, cultural uses, weddings and other small private events, and a few large events. Table 26 provides estimates of the number of current annual visitors and the expected number of future annual visitors to the Main Post under each of the alternatives.

Annual visitation estimates are an aggregate of estimated visitation during peak and off-peak seasons. The traffic, transit, and parking analyses (Section 3.3) are based on trip generation rates that coincide with peak season conditions, where applicable. The potential effect of the increased numbers of visitors on traffic conditions, transit service, trails, and bikeways is considered separately in Section 3.3, Transportation and Parking. The transportation analysis in Section 3.3 is based on standard daily, AM peak hour, and PM peak hour trip generation rates described in Table 8.

Visitors to the Main Post and other districts within the Presidio have various expectations and the visitor experience is highly individualized. The quality of their different experiences depends on multiple factors, including the quality of the natural, cultural, visual, and recreational resources, as well as other components of the environment. (Impacts on these resources are evaluated elsewhere in this final SEIS and are not repeated here.)

Alternative 1

The potential impacts of Alternative 1 on park visitor use are analyzed on pages 292 through 301 of the final PTMP EIS. Under this alternative, a variety of public programs and interpretive and educational opportunities would be provided at the Main Post. The Trust and NPS would collaborate to develop and operate a Visitor Center and to provide interpretative services as well as other educational and cultural opportunities for visitors. The Presidio's cultural, natural, and recreational resources, along with facilities renovated for such purposes by the Trust or by tenants, would provide the setting for a range of public programs. To ensure consistency and quality, the Trust would play a role in the coordination of programs and would provide an increasing level of

[57] *For additional discussion of the methodology, refer to the response to comment titled "Visitation and Visitor Experience" in Section 4.3, Main Post Update EIS Scoping Process and Issues Raised during Scoping, of the draft SEIS.*

financial support over time. Programs would also benefit from philanthropic support.

A Heritage Center in Building 2 at the Main Post would serve as a gateway facility to the Main Post heritage program and provide visitors with an overall framework for understanding the Presidio's natural and cultural history. The program would convey an understanding of history through objects, architectural sites, stories, and audio and video presentations, and would portray the different roles the Presidio has played throughout its history. El Presidio would be commemorated, but 252 parking spaces would remain on the site and Buildings 40 and 41 would continue to make the site difficult for visitors to interpret as the *plaza de armas*.

Rehabilitating the Main Parade consistent with the Main Parade EA would substantially expand public program opportunities by replacing the 7-acre parking lot with a visitor-friendly site design, including an interpretive esplanade and green open space, which would accommodate more events of various sizes. The number of large events would be expected to increase somewhat, but most of the increase would be associated with smaller events.

The 293,000 annual visits to the YMCA Fitness Center would continue, and the other community retail services such as the post office, bank, and restaurants would also continue to draw visitors to the Main Post from the local area as well as serve visitors.

Cultural uses such as the Walt Disney Family Museum and Presidio Theatre would accommodate visitors to the area. The Walt Disney Family Museum expects to draw about the same number or slightly more visitors as the YMCA Fitness Center. Annual visitation to the Presidio Theatre is expected to be about half of the current visitation to the YMCA Fitness Center. Other cultural facilities and visitor amenities, including the Archaeology Center and El Presidio, would be located at the Main Post. Public access to portions of important historic buildings would be maintained and complemented by interpretive displays. Lodging in the historic Building 42, Pershing Hall, would give visitors an opportunity to stay in an historic building.

The Officers' Club, Golden Gate Club, and former Chapel of Our Lady currently host weddings, meetings, and other small events throughout the year. While these venues are currently fully booked in peak seasons, the popularity of these venues is expected to increase such that these venues would be fully booked throughout the year in the future. The addition to the Presidio Chapel would provide new exhibition gallery and meeting space to better serve its visitors.

This alternative would attract approximately 1.3 to 1.6 million recreational visitors annually to the Main Post. This alternative would provide facilities and services designed to accommodate visitation levels. Peak visitor use would occur primarily on weekend days and holidays. Mitigation measures identified in the final PTMP EIS would ensure that visitation levels would not exceed desired conditions and that unacceptable impacts on park resources and visitor experiences would not occur. These measures include limitations on visitor opportunities (CO-4), prohibitions on visitor uses (CO-5), management controls (CO-6), conditions for special events (CO-7), and monitoring of visitor levels (CO-8).

Alternative 2

Alternative 2 would provide a greater variety of facilities for the visiting public than Alternative 1. The range of programs and exhibition space (including a small theater) at a Heritage Center in Building 50 would create more opportunities for visitors to explore the history of the Presidio. The history of Building 50 would also be elevated.

Building 93 at the southern end of the Main Parade would continue to be used for public-serving and programmatic purposes. Restaurants and retail space in the Montgomery Street Barracks buildings would support visitor needs and bring more people to the Main Post.

The Presidio Lodge in a new building would serve more guests, create a focal point for activity and visitor amenities, and animate the Main Post at night in contrast to the office use that would be provided at the site under Alternative 1. Lodging in the historic Building 42, Pershing Hall, would give visitors an opportunity to experience a historic building.

The estimated annual visitation for Alternative 2 would be similar to that estimated for Alternative 1, approximately 1.4 to 1.7 million visitors annually. Alternative 2 would provide a greater variety of public uses, however. In addition to a Heritage Center in Building 50 and the expanded programming opportunities at the Presidio Theatre and the Presidio Chapel, El Presidio would become a focus of visitor interest. Excavation and interpretation at the archaeological site would encourage visitor participation in the archaeological process and allow a variety of visitors, from school children to adults, to explore San Francisco history. A more open site, with reduced parking, would allow for more hands-on special events that may also increase visitation. Like the other alternatives, Alternative 2 would provide facilities and services designed to accommodate expected visitation levels on most days. Existing community services would continue to draw local visitors from the Presidio and surrounding neighborhoods. Peak visitor use would occur primarily on summer weekend days and holidays. Implementation of the mitigation measures identified for Alternative 1 would ensure that unacceptable impacts on adjacent land uses or on visitor use would not occur. The Trust may make adjustments to the way activities are conducted if necessary (including limiting the size of special events and redirecting activities from one location to another), and would monitor uses to minimize use conflicts.

Alternative 3

Alternative 3 would provide fewer facilities for the visiting public than Alternative 1; facilities would be more focused on American history and therefore provide a more limited range of activities for visitors to the Main Post. The NPS and Trust Visitor Center in Building 50 would provide visitor orientation and interpretation services. However, the History Center would be the main visitor facility under this alternative, attracting approximately 150,000 annual visitors. Information within the center would interpret the nearby historic structures and sites to illustrate the larger stories of American history. In addition to lodging in the historic Pershing Hall, “bed and breakfast” accommodations would also be available to a limited number of visitors in the upper Funston Avenue Officers’ Quarters (historic Buildings 11-16). As with Alternative 2, the spatial character of El Presidio would be re-established and the removal of all parking from the site, as well as the closure of portions of Moraga Avenue and Graham Street, would further emphasize the site’s importance to visitors.

The remaining Montgomery Street Barracks (Buildings 101, 103, and 105) would be occupied by office uses rather than the mix of visitor-oriented ground floor uses assumed in Alternatives 1 and 2. The Presidio Theatre and Presidio Chapel would remain at their current size, have fewer programming opportunities, and attract fewer visitors than in Alternatives 1 and 2. This alternative would be expected to attract approximately 1.2 to 1.4 million recreational visitors annually to the Main Post. The Trust would implement measures (see Alternative 1) to ensure that visitor use would not adversely affect the park's resources or the public's enjoyment of the park.

Alternative 4

Under this alternative, minimal actions would be taken to expand visitor opportunities beyond existing facilities, and few benefits would be provided to enhance visitor experience. The NPS Visitor Center would offer a variety of interpretive services and media. Use of other existing visitor facilities for purposes of interpreting the park and delivering visitor information would continue. Public programs would continue, with little expansion. Other programs, such as the proposed heritage program under Alternative 1, would most likely not occur or would attract substantially fewer visitors. There would be fewer cultural or educational tenants than in other alternatives, and tenant-based public programs, which would depend on the initiative of park tenants, would be minimal. This alternative would attract approximately 1.1 to 1.3 million recreational visitors annually. The Walt Disney Family Museum and YMCA Fitness Center would combine to attract approximately half of all visitors.

MITIGATION MEASURES

The following measures from the final PTMP EIS would ensure that visitor use at the Main Post is managed to address unacceptable impacts on park resources and visitors.

CO-4 *Limitations of Visitor Opportunities* The Trust will limit visitor opportunities to those that are suited and appropriate to the significant natural, historic, scenic, cultural, and recreational resources of the Presidio. Only those visitor activities that are consistent with the Trust Act and appropriate to the purpose for which the park was established will be allowed. The Trust will welcome tenants to provide activities consistent with these requirements.

CO-5 *Prohibitions on Visitor Uses* The Trust will prohibit visitor uses that would impair park resources or values, or interfere with NPS interpretive activities or other existing, appropriate park uses.

CO-6 *Management Controls* The Trust will impose management controls on visitor uses, if necessary, to ensure that the Presidio's resources are protected. If an ongoing or proposed activity would cause unacceptable impacts to park resources, adjustments will be made to the way the activity is conducted, including placing limitations on the activity, so as to eliminate the unacceptable impacts. Any restrictions will be based on professional judgment, law and policy, the best available scientific study or research, appropriate environmental review, and other available data. As visitor use changes over time, the Trust will decide if management actions are needed to keep use at acceptable and sustainable levels.

CO-7 *Special Events* The Trust will impose appropriate permit conditions for special events to ensure that park resources are protected.

CO-8 *Monitoring of Visitor Levels* The Trust will monitor visitation levels to ensure that park uses would not unacceptably affect Presidio resources. Visitor carrying capacities for managing visitor use will be identified if necessary.

REFERENCES

Bloomberg. 2008. *Heigh-Ho Heigh-Ho, Off to the Municipal Market We Go: Joe Mysak*. Dated April 4.

City and County of San Francisco Planning Department. 2000. *Transportation Impact Analysis Guidelines, Interim Edition.* Dated January.

Family Violence Prevention Fund. 2004. *Proposal for Presidio Trust Building 100*. Dated February 12.

Larkspur Hotels & Restaurants in association with Hornberger + Worstell Architects. 2007. *The Presidio Lodge, The Presidio – San Francisco, California*. Dated June 4.

Presidio Bowling Center. 2008. *Telephone Correspondence with Victor Meyerhoff, Proprietor*. February 13.

Presidio Community YMCA. 2008. *Electronic Mail Correspondence from Robert Sinclair, Executive Director*. February 29.

Presidio Historical Association. No date. *Proposal for a Cultural Institution at the Presidio Main Post, A History Center at the Golden Gate*.

3.10 Recreation

AFFECTED ENVIRONMENT

The following recreational facilities on the Main Post could be affected by the alternatives, including the mitigated preferred alternative.

Presidio Bowling Center (Building 93)

The 12-lane, public Presidio Bowling Center features a pro shop, a snack bar/grill, and bathrooms, and supports 10 adult and youth leagues. The Bowling Center, one of two remaining in San Francisco,[58] is open seven days per week. In 2007, the Bowling Center received approximately 90,000 visits (Presidio Bowling Center 2007).

Main Post Tennis Court

The Presidio Community YMCA tennis program is available for members of the YMCA and provides recreational tennis opportunities for children and adults through individual and group lessons, youth and adult league and tournament play, summer camp programs, and cardio-tennis exercise classes for tennis and non-tennis players. The recreational facilities of the Presidio Community YMCA are also used by the Bay School located in the Presidio for both team/league sports, and for physical education and general recreation. The YMCA tennis program receives approximately 28,800 visits per year (Presidio Community YMCA 2008).

The YMCA started with two United States Tennis Association (USTA) teams in 1998 and has built its program significantly over the years, increasing participation every year. The Presidio Community YMCA's tennis program supported 12 USTA tennis teams: Men's (three levels), Women's (three levels), Mixed Doubles' (two levels), Combo Doubles' (Men's two levels, Women's one level), and Seniors' (Women). The USTA teams compete with other teams hosted at public and private courts and clubs in San Francisco and south of the city. With an average of 20 players per team, there are approximately 240 active league tennis players in the Presidio.

The Main Post tennis court is one of six at the Presidio that are currently administered by the Presidio Community YMCA. The Bowling Center provides the only permanent restroom facility accessible to a YMCA-administered tennis court.[59]

Other nearby courts include those at Infantry Terrace and on Ruger Street. The four courts at the Julius Kahn Playground are managed by the City and County of San Francisco (Recreation and Park Department). There are

[58] *The other facility is the Yerba Buena Ice Skating and Bowling Center at Yerba Buena Gardens on the rooftop of the Moscone Center in downtown San Francisco.*

[59] *During scoping, several commentors noted that league and youth programs that the YMCA supports require the use of a bathroom facility in close proximity to a tennis court.*

an additional 128 free municipal tennis courts located at playgrounds, parks, and recreation centers throughout San Francisco, including four courts at Mountain Lake Park. Golden Gate Park has 21 courts that can be reserved for a nominal fee. San Francisco has approximately 63,000 adult tennis players and supporters and nearly 11,000 youth players (Schwartz 2007).

According to community members, tennis programs in the city lack consistency, offer little cohesion, and are not comprehensive enough to meet the needs of the diverse tennis community. In addition, the conditions of the courts throughout the city, and at Golden Gate Park in particular, show significant wear and require many updates to produce effective programs, enhance events, and create greater opportunity for play in the future. The Recreation and Park Department, the San Francisco Tennis Coalition, and the USTA have plans to re-build the tennis court complex in Golden Gate Park. The existing tennis court complex was tentatively planned for demolition during the summer of 2008, and the new tennis complex was intended to be completed by the summer of 2009, but with five fewer courts (16 total) than currently exist. To date, the project has not started.

ENVIRONMENTAL CONSEQUENCES

Methodology

For this analysis, each alternative was analyzed for potential impacts on recreational activities and use.

Alternative 1

The impact of this alternative on recreational activities and use is evaluated on page 297 of the final PTMP EIS. The analysis indicated that existing built recreational facilities at the Main Post, including the Presidio Bowling Center and tennis court, would remain open to the public, but others could be removed as needed to meet other planning objectives. The Trust would evaluate the potential for additional recreational facilities, and levels of use in balance with other park resource goals. Options for additional built facilities, indoors and outdoors, would be considered. Future planning efforts would further define compatible recreational activities and locations and would address the potential relocation of existing facilities or construction of new ones. Because no recreational facilities would be removed, no adverse effects are expected.

Alternative 2

This alternative would discontinue the current recreational use of the existing Bowling Center to accommodate another public use at the site. The Bowling Center could be relocated elsewhere within the Presidio subject to a Request for Proposals, the execution of a lease agreement, and site-specific environmental review. The popularity of bowling has consistently declined during the past few decades as other athletic interests claimed the public's attention.[60] There are about 5,600 bowling centers in the United States, a decrease from nearly 6,700 in 1996 (and from an all-time high of nearly 11,000 in 1962). Many of the closures were due to

[60] *According to bowl.com, the official web site of the United States Bowling Congress, which serves as the national governing body and membership organization for the sport of bowling.*

properties being more profitable when serving a different purpose, and not due to financial difficulties. The closing of the Presidio Bowling Center would follow this national trend that has been gradual but magnified in metropolitan areas. During the past 12 years, San Francisco alone has experienced the loss of 62 lanes of bowling, and only 12 lanes would remain with the Presidio Bowling Center's closure. Should the Bowling Center not be replaced, its removal would have an adverse effect on current users, whose needs would have to be met through other facilities within driving distance outside the Presidio boundaries.

In accordance with the Trust's vision to maintain or slightly increase the current number of playing fields, this alternative would include an athletic field near buildings 386 and 387. Parking would be available in the adjacent lot to support the use.

Alternative 3

This alternative would remove the existing Presidio Bowling Center and adjacent tennis court to accommodate the History Center. The associated impacts of removing the Bowling Center would be similar to those evaluated under Alternative 2.

The tennis court could be relocated to another site within the Presidio as funding permits and subject to site-specific environmental review. The YMCA tennis community has requested that one or more replacement courts be built according to USTA standards and include lights and restrooms. Should the tennis court not be replaced, its removal would have an adverse effect on current users, whose needs would have to be met through other facilities within the park.

Alternative 4

This alternative would retain the Presidio Bowling Center and adjacent tennis court for public use. Because recreational facilities would remain, no adverse effects are expected.

MITIGATION MEASURES

The following measure adapted from the final PTMP EIS would reduce impacts on recreational facilities.

CO-10 *Relocation or Replacement of Recreational Facilities* Should any recreational facilities need to be relocated in conjunction with other planning objectives, their relocation or replacement would be pursued during activity- or planning area-specific analyses.

REFERENCES

Presidio Bowling Center. 2007. *Electronic Mail Correspondence from Victor Meyerhoff, Proprietor.* October 12.

Presidio Community YMCA. 2008. *Electronic Mail Correspondence from Robert Sindelar, Executive Director.* February 29.

Schwartz, Dr. Terry G., Superintendent of Citywide Services. 2007. *A Business Plan for Tennis, An Opportunity to be World Class.* San Francisco Recreation and Park Department.

3.11 Water Resources

AFFECTED ENVIRONMENT

Water quality and storm drainage are described on pages 118 through 121 and 188 through 189 of the final PTMP EIS. Relevant portions of these descriptions are incorporated herein by reference and expanded upon as necessary.

Surface Hydrology and Storm Drainage

The Presidio has three major watersheds, the Northeast, West, and Southern, each comprised of drainage basins that are further divided into subbasin areas. Located within the Northeast watershed, the Main Post occupies a northward-sloping hillside that drains north to San Francisco Bay. Maximum elevation is approximately 250 feet in the south, descending to an elevation of around 10 feet at the northern district boundary. Roughly 40 percent of the 120 acres within the Main Post are occupied by buildings, paving, and other hardscape impervious surfaces. Figure 13 shows the various open space areas within the Main Post.

Unlike the City of San Francisco, the Presidio, with the exception of the Public Health Services district, has separate storm water and sanitary sewer systems. The Main Post district is divided among three drainage basins as defined by the 1994 Presidio Stormwater Management Plan (SMP) (Dames & Moore 1994). Drainage Basin D serves the eastern portion of the district, roughly the area east of Anza Street. Drainage Basin F serves the central portion of the district between Anza Street and Taylor Road, and the area south of Lincoln Boulevard. Drainage Basin G serves the area west of Taylor Street.

Storm Drainage System The drainage system serving the Main Post is comprised of several elements that work together to direct and convey surface runoff from undeveloped open space in the upper portions of the watershed, landscaping around buildings, parking areas, and roadways. Runoff from open space and landscaped areas flows overland to roadways (or other paved surface), or flows directly to receiving waters such as Tennessee Hollow. The Main Parade, a dominant feature within the Main Post, currently consists of seven acres of impervious area that is directly connected to the storm drain system. Open channels and curbs and gutters along roadways intercept runoff and convey it down-gradient to catchbasin (inlet) structures. From this point, a combination of storm drainage piping and larger open channels convey the runoff to the receiving waters. The three drainage basins serving the district discharge to San Francisco Bay, either directly or through Crissy Field marsh.

The stormwater drainage network serving the Main Post was constructed piecemeal as land was developed over many decades. In total the storm drain system serving the district includes more than 25,000 lineal feet of pipe ranging from 4 to 72 inches in diameter and more than 10,000 lineal feet of maintained open channels (lined and unlined).

As part of the 1997 Presidio Storm Drain Survey Report (1997 Survey Report) (Dames & Moore 1997), the district's system was evaluated for both capacity and structural deficiencies. Some of the recommended

improvements have been implemented while others are still pending. As discussed below, the outlets of the systems were upgraded as part of the Crissy Field plan. The balance of the recommendations would be done in conjunction with associated developments, if needed.

Drainage Basin Capacities Drainage Basin D, which drains the eastern portion of the district as well as portions of the Letterman and East Housing districts, has a 10-year design flow of 101.2 cubic feet per second (cfs). The 72-inch concrete pipe serving the basin has a capacity of 308 cfs, which is sufficient to handle the expected design flow. In an effort to restore habitat and increase natural infiltration, the Trust recently "day-lighted" the Thompson Reach located north of Lincoln Boulevard. The project consisted of removing approximately 500 lineal feet of 72-inch pipe and restoring the riparian corridor.

Drainage Basin F, which serves the central portion of the district, has a 10-year design flow of 72.1 cfs. The primary trunk system is 30-inch reinforced concrete pipe (RCP) and has a capacity of 77 cfs, which is sufficient to handle the expected design flow. As part of the Crissy Field plan, the outfall was reconstructed to discharge into the newly constructed marsh and was equipped with an oil/water separator.

Drainage Basin G, which serves the western portion of the district, has a 10-year design flow of 30.7 cfs. The 30-inch trunk line serving the basin was installed as part of the Crissy Field plan and has a design capacity of 44 cfs, which is sufficient to handle the expected design flow. The outlet is also equipped with an oil/water separator. The section of pipeline in Taylor Street was upgraded to 18 inches in 2006.

Wetlands

Wetlands within the Main Post are generally confined to the Tennessee Hollow and Infantry Terrace areas, where natural creeks have been largely eliminated and/or altered by past filling, grading, and construction, leaving only isolated segments of the riparian corridor. The Presidio wetland resources report (URS 2003) identified a wetland at Infantry Terrance, south of Building 387, which is the likely headwaters for the stream that originally flowed through the Main Post area. Wetland conditions were restored at Thompson Reach following a landfill remediation project in the area (former Fill Site 6A). Runoff from the Tennessee Hollow area flows north into Crissy Field marsh, located just north of Mason Street on San Francisco Bay.

Groundwater Hydrology

The quantity and quality of groundwater are highly dependent on the type and thickness of the geologic materials present. Groundwater at the Presidio occurs within Colma formation, dunes, Bay Mud, artificial fill, and Franciscan bedrock. The Main Post supports dune and beach sands and estuarine sediments. Subsurface data and a thorough understanding of the natural groundwater complexity of the Main Post are lacking. However, two of five test borings conducted south of the Main Parade encountered subsurface water at depths of approximately 19 and 25.5 feet below ground surface (bgs), corresponding to approximate Elevations 64 and 71 respectively (Treadwell & Rollo 2008). The measured water levels likely represent perched groundwater that may not be present year-round. Perched groundwater is water moving laterally and/or downward through sandy soils. This movement of subsurface or perched water is affected by less permeable clayey layers. The spring

identified in the Infantry Terrace area is a likely contributor of the perched groundwater. In general, geotechnical studies conducted in the Main Post area have identified the groundwater table to be located approximately 33 feet bgs at the north end of the Main Parade and 43 to 50 feet bgs at the southern end (Treadwell & Rollo 2007 and Olivia Chen Consultants 1999).

Water Quality

The Presidio has implemented and is operating under the 1994 SMP, which includes a detailed Stormwater Pollution Prevention Plan (SWPPP) that outlines erosion prevention and sedimentation control measures used by the Presidio to avoid contamination of storm drains and surface water resources. The SMP is being updated to reflect changes in stormwater routing and new National Pollutant Discharge Elimination System (NPDES) Phase II stormwater permitting requirements.

NPDES regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Under these regulations the Presidio is identified as a Non-traditional Small MS4 facility. The Presidio and other facilities with the same classification are not currently designated for coverage under the NPDES Phase II program. However, the Regional Water Quality Control Board (RWQCB), which administers the NPDES permit program, will likely require the Trust to seek coverage under the NPDES Phase II program. Consequently, the SMP update will be based on the six minimum measures identified in the Phase II program. The six minimum measures are:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping (U.S. EPA 2005)

ENVIRONMENTAL CONSEQUENCES

Methodology

This analysis follows the same methodology used in the final PTMP EIS to assess impacts on water quality and storm drainage. As discussed below, impacts on water quality and storm drainage directly relate to changes in impervious surfaces. For the alternatives, the increase or decrease in impervious surface and resultant change in stormwater runoff were estimated. The analysis in the final PTMP EIS only considered the impacts of new construction. The analysis below includes new construction along with planned improvements to the Main Parade consistent with the Main Parade EA and the construction of surface parking lots throughout the Main Post. Underground parking beneath new buildings and below-grade portions of new construction are not included in the calculation of impervious surface, as the change in impervious surface that corresponds to the parking and below-grade portions of buildings is included in the new construction square footage estimate.

In general, development increases the amount of impervious surfaces. Potential impacts due to displacement of vegetated soil with buildings, walk areas, parking lots, and roadways include:

- Reduced opportunity for rainfall and any associated runoff to infiltrate into the underlying vegetated soil strata, where it can be treated by the root/soil matrix and associated microbial action;
- Increased rate of stormwater flow discharged to stormwater collection and conveyance systems and their downstream receiving waters, which can cause erosion; and
- Increased opportunities for stormwater to pick up pollutants.

This combination of effects results in a larger volume of stormwater discharged at a faster rate with a higher pollutant load, all of which can negatively affect the quality of receiving waters.

Effects of higher pollutant loads on receiving water quality include:

- Higher turbidity from soil erosion due to insufficient use of Best Management Practices (BMPs) during construction activities;
- Algal blooms and similar effects from transport of nutrients from yard and garden fertilization;
- Water-borne pathogens and emerging pollutants from human and animal wastewater discharges; and
- More recently, parasite-borne diseases and viruses (e.g., West Nile Virus carried by mosquitoes).

Stormwater runoff from unprotected disturbed areas can become concentrated and cause erosion and/or undermining of vegetation root systems, resulting in slope instability and loss of soil. Implementing BMPs that discourage sheet flow reduces velocities and flow rates to levels that storm drain infrastructure can handle more effectively. As stormwater infiltrates before discharging to receiving waters, it can be treated, and pollutants, including pathogens and nutrients, can be removed.

Transport of pollutants to receiving waters occurs primarily during the more frequent smaller rainfall events. These events, generally referred to as “first flush” events, transport the pollutants that have accumulated on buildings and paved surfaces since the last rainfall event. The amount of pollutants picked up and transported by stormwater runoff during first flush events is disproportionately large when compared with larger less frequent rainfall events. For this reason, BMPs generally focus on capturing the first flush and treating the stormwater and associated pollutants before allowing transport to receiving waters. Appendix C includes a list of BMPs appropriate for the Main Post and guidance on their selection, design, and implementation (URS 2008). These post-construction BMPs were selected to comply with post-construction runoff control requirements of the Phase II NPDES permit.

Alternative 1

The final PTMP EIS analyzed impacts on water quality and storm drainage on pages 240 to 246 and 335 to 341. Tables 26 and 27 summarize the change in impervious surfaces and stormwater runoff from existing conditions under Alternative 1 and the other alternatives. With the rehabilitation of the Main Parade, there would be an overall decrease in impervious area within the district, which would reduce the

27 CHANGES IN IMPERVIOUS AREA WITHIN THE MAIN POST

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
BUILDINGS (square feet)				
New Construction	110,000	147,000	77,000	26,000
Demolition	-44,000	-94,000	-64,000	-34,000
Change	66,000	53,000	13,000	-8,000
PARKING LOTS (square feet)				
Existing	481,000	481,000	481,000	481,000
Proposed[2]	575,000	510,000	453,000	587,000
Change	94,000	29,000	-28,000	106,000
MAIN PARADE (square feet)				
Change	-269,000	-269,000	-269,000	-269,000
TOTAL CHANGE IN IMPERVIOUS SURFACE	**-109,000**	**-187,000**	**-284,000**	**-171,000**

Source: Presidio Trust 2010

[1] *Assumes that all demolition and new construction would be single-story structures.*

[2] *Excludes underground and garage parking because it is assumed that underground parking would be beneath buildings or would have a single level of exposed parking that has been incorporated into the analysis. See Table 16.*

28 CHANGES IN STORMWATER RUNOFF WITHIN THE MAIN POST

	Alternative 1	*Alternative 2*	*Alternative 3*	*Alternative 4*
Change in Impervious Area (acres)[1]	-2.50	-4.29	-6.52	-3.93
Change in Runoff (cubic feet per second)[2]	-1.81	-3.10	-4.71	-2.84

Source: Presidio Trust 2010

[1] Refer to Table 27 for a summary of the change in impervious area expressed in square feet.

[2] Change in runoff (Q) expressed in cubic feet per second (cfs) was derived from Q=CiA with runoff coefficient C equal to 0.85, rainfall intensity i equal to 0.85 inch/hour, and A equal to area of watershed in acres.

overall storm runoff relative to the current conditions. Refer to Figure 3. (Alternative 1: Circulation and Parking) for the locations of parking lots for Alternative 1. New surface parking lots could degrade surface water quality by increasing the concentration of pollutants such as oils, lubricants, grease, sediment, and other pollutants commonly contained in urban runoff unless properly controlled. Implementation of structural and operational BMPs would address potential impacts from new parking lots. The existing trunk systems serving the district have sufficient capacity to accommodate the expected flows. Smaller local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development.

The resulting changes to hydrology, groundwater, and wetlands under this alternative would not be appreciable. As required by PTMP EIS Mitigation Measure NR-16/19 *Stormwater Control*, proponents would develop and implement post-construction BMPs (see Appendix C) appropriate for individual project sites to reduce runoff and protect water quality. BMPs that would be used to treat stormwater include infiltration-based features (disconnected downspouts, vegetated swales, bioretention areas, shallow open infiltration area), underground exfiltration trenches, porous pavements, retention and detention ponds, and created wetlands. Structural BMPs such as treatment manholes and oil/water separators would also be used. Additionally, as required by PTMP EIS Mitigation Measure UT-6 *Stormwater Drainage System Upgrades*, necessary upgrades to the stormwater drainage system would be completed in advance of post-construction impacts.

Short-term construction activities, such as excavation, grading, and stockpiling of soil, could also degrade the quality of surface water. As required by PTMP EIS Mitigation Measure NR-15 *Stormwater Pollution Prevention*, construction site operators would prepare a Stormwater Pollution Prevention Plan (SWPPP) for projects requiring NPDES permit

coverage for their stormwater discharges. The SWPPP would identify potential pollutant sources that could affect the quality of runoff, and identify and implement BMPs to reduce pollutants in stormwater discharges from the construction site. Control measures could include construction of detention structures, installation of siltation fencing, appropriate grading practices, dust control, soil stabilization, and temporary seeding. The SWPPP would specify a monitoring program to monitor storm drain runoff at construction sites. Compliance with the requirements of the Clean Water Act through the SWPPP would prevent stormwater contamination and control sedimentation and erosion.

Alternative 2

Compared to existing conditions, this alternative would decrease the amount of impervious surface by approximately 187,000 square feet, resulting in a decrease in runoff of approximately 3.10 cfs (see Table 28). This runoff decrease would be 1.29 cfs greater than the 1.81-cfs decrease under Alternative 1 (see Table 28). Refer to Figure 6 (Alternative 2: Circulation and Parking) for the locations of parking lots in Alternative 2. The existing trunk systems serving the district would have sufficient capacity to accommodate the expected flows. Smaller and local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development. Construction of new surface parking lots could degrade surface water quality unless properly controlled using BMPs (as required by PTMP EIS Mitigation Measures NR-15 and NR-16/19).

Similar to Alternative 1, the resulting changes in hydrology, groundwater, and wetlands would not be appreciable. PTMP EIS Mitigation Measure NR-16/19 *Stormwater Control* requires projects to develop and implement Stormwater Control Plans that include post-construction BMPs appropriate for the sites (see Appendix C) to reduce runoff and protect water quality. Additionally, as required by PTMP EIS Mitigation Measure UT-6 *Stormwater Drainage System Upgrades*, necessary upgrades to the stormwater drainage system would be completed in advance of post-construction impacts.

This alternative proposes construction of underground parking at the lodge site (to be located at the current Building 34 site) and at the north end of the district. According to geotechnical investigations done near the lodge and Bowling Center sites, groundwater is expected to be approximately 50 feet below the ground surface. The investigations also encountered perched groundwater at approximately 19 to 26 feet below the ground surface. Below-grade improvements are not expected to extend into the groundwater but would likely encounter the perched groundwater. If encountered, new below-grade structures would inhibit the current flow path of the perched groundwater. These impacts are expected to be localized, however, as the perched groundwater would migrate around the below-grade structure. A permanent active dewatering system is not expected to be required. An active dewatering system consisting of a series of wells would likely be necessary during excavation. Any groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge*, requiring that groundwater meet specific water quality standards before if may be discharged into the sewer system.

Construction of underground parking at the north end of the district would likely affect groundwater. As no design has been developed for the underground parking facility, additional site-specific analysis and environmental review would be required to assess site-specific impacts

on groundwater resources. Based on information developed for the Doyle Drive tunnel within the bluff area, underground parking in this area would most likely contain standard drainage features (i.e., a permeable gravel envelope or strip drains) around the structure so that groundwater would be expected to flow from the northern upgradient areas, under the parking, and toward the bay without being impeded. In addition to any requirements identified in the site-specific analysis, groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge.*

The proposed athletic field located south of Building 386 would be in the vicinity of the wetland identified in Infantry Terrace. The location and design of the athletic field would be modified to avoid impacts on the wetland.

Alternative 3

This alternative would decrease the amount of impervious surface over existing conditions by approximately 284,000 square feet (see Table 27), resulting in a decrease in runoff of approximately 4.71 cfs (see Table 28). This runoff decrease would be 2.90 cfs greater than the 1.81-cfs decrease under Alternative 1. Refer to Figure 9 (Alternative 3: Circulation and Parking) for the locations of parking lots for this alternative. Similar to Alternative 1, the existing trunk systems serving the district would have sufficient capacity to accommodate the expected flows. Smaller and local systems would be upgraded to correct deficiencies identified in the 1997 Survey Report and to facilitate connection to new development. Construction of new surface parking lots could degrade surface water quality unless properly controlled using BMPs.

This alternative proposes underground parking at the history center. Similar to Alternative 2, below-grade improvements are not expected to extend into the groundwater (approximately 50 feet below the ground surface) but would likely encounter perched groundwater (approximately 19 to 26 feet below ground surface). A permanent active dewatering system is not expected to be required. Any groundwater encountered during construction would be subject to the requirements in Mitigation Measure NR-26 *Groundwater Discharge.*

Similar to Alternative 1, short-term construction activities, such as excavation, grading, and stockpiling of soil, could degrade the quality of surface water. PTMP EIS Mitigation Measure NR-15 *Stormwater Pollution Prevention* would require construction site operators to prepare a SWPPP to prevent stormwater pollution.

Alternative 4

Under Alternative 4, no new construction would take place beyond the projects built or permitted to date. Compared to existing conditions, this alternative would result in a 171,000-square-foot reduction of impervious surface (see Table 27) and a 2.84-cfs reduction in stormwater runoff (see Table 28). This runoff decrease would be 1.03 cfs greater than the 1.81-cfs decrease under Alternative 1 (see Table 28).

MITIGATION MEASURES

The following PTMP EIS mitigation measures would be implemented to minimize or avoid potentially adverse effects related to hydrology, wetlands, and water quality.

NR-15 *Stormwater Pollution Prevention* The construction site operator will develop a Stormwater Pollution Prevention Plan (SWPPP) that provides for temporary measures to control sediment and other pollutants during construction.

NR 16/19 *Stormwater Control* The project civil engineer will develop a Stormwater Control Plan to minimize site imperviousness, control pollutant sources, and incorporate treatment and flow-control facilities that retain, detain, or treat runoff. The Stormwater Control Plan will meet the requirements of the NPDES Phase II permit for Post-Construction Runoff Control and incorporate as appropriate the post-construction BMPs included but not limited to those in Appendix C.

UT-6 *Stormwater Drainage System Upgrades* The Trust will make necessary infrastructure upgrades to the stormwater drainage system to ensure that adequate system capacity is provided and also to correct existing operational problems.

In addition, the following new mitigation measure would be implemented.

NR-26 *Groundwater Discharge (new)* If dewatering is necessary during construction, pumped groundwater will be retained in a holding tank to allow suspended particles to settle and testing as required prior to discharging to either the sewer system or storm drain system. If additional treatment is required, project civil engineers will follow the recommendations of the geotechnical engineer or environmental remediation consultant, in consultation with the Trust and in compliance with appropriate standards regarding treatment of pumped groundwater prior the discharge to either the sewer system or storm drain system. Prior to discharging to the storm drain system, the project civil engineer will determine whether a permit from the Regional Water Quality Control Board (RWQCB) under a general NPDES dewatering permit is required.

REFERENCES

Dames & Moore. 1994. *Presidio of San Francisco Stormwater Management Plan*. Prepared for the National Park Service. Dated October.

_____. 1997. *Presidio Storm Drain Survey Report*. Dated October.

Olivia Chen Consultants. 1999. *Geotechnical Data Report, Presidio Parking Management Plan: Underground Parking Feasibility Study*. Dated August.

Treadwell & Rollo. 2007. *Preliminary Geotechnical Study, Contemporary Art Museum at the Presidio, Buildings 93, 97 and 98 at the Presidio of San Francisco.* Dated December.

_____. 2008. *Geotechnical Investigation: Contemporary Art Museum at the Presidio.* Dated April.

URS Corporation (URS). 2003. *Presidio Wetland Resources*. Dated April.

_____. 2008. *Post-Construction Stormwater Best Management Practices*.

U.S. Environmental Protection Agency (U.S. EPA). 2005. *Stormwater Phase II Final Rule*.

3.12 Cumulative Impacts

SUMMARY OF FINAL PTMP EIS CUMULATIVE IMPACT ANALYSIS

The cumulative impacts[61] of development on the Main Post and other districts within the Presidio were analyzed on pages 363 through 375 of the final PTMP EIS. Table 60 on page 364 of the final PTMP EIS, which provided the context for the discussion, enumerated 21 past, present, and reasonably foreseeable actions, including projects by other agencies (NPS; United States Fish and Wildlife Service; Golden Gate Bridge, Highway and Transportation District; and the City and County of San Francisco) that were specifically considered in the analysis. Background growth was also considered in the analysis. Actions were chosen for analysis based on their proximity to the Presidio, their potential to affect the same resources that could be affected by implementation of the PTMP, and the likelihood of their occurrence. The actions were identified by consulting with various agencies within a project impact zone (which varied for each resource) and investigating their actions in the planning, budgeting, or execution phase. In some cases, cumulative impacts were also compared to appropriate national, state, regional, or community goals to determine whether the total impact would be significant. In all but one of the 25 resource topics that were analyzed, the analysis in the final PTMP EIS determined that cumulative impacts would not be significant and that the resources of concern would not be degraded. Cumulative air quality impacts were found to be potentially significant due to contributions from regional growth (i.e., not due to localized air quality impacts). Development within the Main Post district would contribute to the referenced cumulative impacts. No mitigation measures for cumulative impacts have been previously identified.

[61] *"Cumulative impact" is defined in CEQ's NEPA regulations as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions ..." (40 CFR 1508.7).*

CUMULATIVE ACTIONS AND RESOURCES AFFECTED

The Trust found the following actions relevant to the cumulative impact analysis because they could have a significant cause-and-effect relationship with the direct and indirect effects of the mitigated preferred alternative (Alternative 2) as well as with other alternatives. These actions are shown in Figure 37.

- Rehabilitation of the approximately 100-acre portion of Crissy Field north of Mason Street (Area A), including removal of 32 historic buildings for the restoration of historic military airfield elements and reintroduction of ecological systems as analyzed in the NPS Crissy Field Plan EA (1996), and, most recently, the relocation of the Crissy Field Center (CFC) to the eastern edge of Crissy Field (Area A) as outlined in the NPS CFC Temporary Relocation Impact Assessment (2009).

0 N 400 FT

Source: Presidio Trust 2010

1 Main Parade
2 Walt Disney Family Museum
3 International Center to End Violence
4 Tennessee Hollow
5 Thornburgh Buildings
6 Presidio Water Recycling Plant
7 Letterman Digital Arts Center
8 Public Health Service Hospital (inset)
9 Doyle Drive
10 Crissy Field (Area A)

- Improvements to the Main Parade as analyzed in the Trust's Main Parade EA (2007a).
- Rehabilitation and new construction at Buildings 104, 122, and 108, as analyzed in the Trust's Walt Disney Family Museum EA (2006a).
- Rehabilitation and new construction at Building 100, as analyzed in the Trust's International Center to End Violence EA (2007b).
- Revitalization of up to 28 acres within Tennessee Hollow, including creek and habitat restoration, new trails, an interpretative garden, reorganization and rehabilitation of playing fields, picnic areas, and other visitor amenities such as a public restrooms, as analyzed in the Trust's Tennessee Hollow Upper Watershed Revitalization Project EA (2007c). Also, creek restoration within the northernmost (lowest) end of Tennessee Hollow known as the Quartermaster Reach, as analyzed in the Trust's Quartermaster Reach EA (2010).
- Rehabilitation of 12 historic Thornburgh buildings, and associated roadway, parking, and landscape improvements in the 37-acre Thornburgh area within the portion of the Letterman district known as West Letterman, as noticed in the Trust's Letter of Intent to Initiate Public Scoping and Prepare an EA (2007d).
- Rehabilitation of Building 1063 for the Presidio water recycling plant at East Letterman, as analyzed in the Trust's Presidio Water Recycling Project EA (2002).
- Development of the Letterman Digital Arts Center (LDAC) at West Letterman, as analyzed in the Trust's Final SEIS for New Development and Uses on 23 Acres within the Letterman Complex (2000) and updated to reflect new information bearing on the action or its impacts.
- Removal of the non-historic "wings" of Building 1801, together with other non-historic buildings and additions, and rehabilitation of Building 1801 and other historic buildings for residential use within the 18-acre Public Health Service Hospital complex, as analyzed in the Trust's Final SEIS for the Public Health Service Hospital at the Presidio of San Francisco (2006b).
- Reconstruction of Doyle Drive based on the preferred Presidio Parkway alternative, as analyzed in the San Francisco County Transportation Authority's Final Environmental Impact Statement/Report (EIS/R) and Final Section 4(f) Evaluation for Doyle Drive, South Access to the Golden Gate Bridge (2008).

CONTRIBUTION OF MITIGATED PREFERRED ALTERNATIVE AND OTHER ALTERNATIVES TO CUMULATIVE IMPACTS

Overall, the incremental impacts associated with the mitigated preferred alternative, as well as with all other alternatives, are not expected to be significant, with the possible exception of historic resources and archaeology. In several instances, the incremental contribution of the mitigated preferred alternative and other alternatives to the cumulative impact on the Main Post and Presidio would be neutral or beneficial. Specific resources that were identified through the scoping process, and/or that may be affected by these cumulative actions, include the following: land use, transportation, parking, air quality, noise, historic resources, archaeology, visual resources, visitation, recreation, and water resources. The following analysis generally focuses on the mitigated

preferred alternative and on cumulative impacts within the Main Post. The other alternatives and districts are also discussed where relevant to reasonably foreseeable, significant cumulative impacts, and where essential to a reasoned choice among alternatives.

Land Use

By accommodating a variety of land uses, removing pavement, and demolishing buildings at the Main Post, the cumulative actions would result in substantially more open space of higher quality than exists today, with only a slight increase in the overall building square footage. Overall, improvements at the Main Parade and El Presidio, restoration of the Tennessee Hollow stream corridor (including Quartermaster Reach), and reconstruction of Doyle Drive represent considerable physical changes to the Main Post's built environment, expanding open space by approximately 70 percent, from 28 acres to 48 acres. Removing large parking areas (Main Parade and El Presidio), redesigning and partial tunneling of the Doyle Drive corridor (Doyle Drive), and removing underground pipes and lined channels along the creek system (Tennessee Hollow and Quartermaster Reach) would substantially alter land use patterns. The projects would provide a more park-like setting at those sites by restoring native plant habitat, enhancing the historic setting, and creating more outdoor recreational space. Due to the cumulative actions, building space at the Main Post would increase by approximately 5 percent to a maximum of 1.215 million square feet under Alternative 1, the PTMP alternative, 14,000 square feet more than under Alternative 2, the mitigated preferred alternative. However, none of the new building area due to the cumulative actions would conflict with adjacent building or land uses or compromise the nature and character of the Main Post, the Presidio at large, or surrounding neighborhoods.

Transportation

The transportation impact analysis presented in Section 3.3 identifies the combined effect of PTMP and updated Main Post assumptions along with changes to land uses elsewhere in the Presidio and projected regional growth, and thus inherently provides a cumulative analysis of future (2030) transportation conditions. Updated assumptions for other parts of the Presidio include:

- Updated trip generation data for the Letterman Digital Arts Center that reflect subleases for restaurant and office space;
- Updated information for the Thornburgh area at West Letterman that reflects the currently planned uses;
- Updated projections for the East Housing district that reflect the restaurant on Ruger Street; and
- Updated projections for the West Crissy Hangar Complex that reflect the specific uses recently added.

Growth in traffic volumes projected for the area, including that which is projected for Alternative 2, would have an impact on the operation of local intersections. Mitigation measures adopted both as part of the final PTMP EIS and the final SEIS, however, would improve intersection operations to acceptable levels under cumulative conditions.

Following implementation of any of the alternatives, the Main Post would account for a large portion of the vehicle trips generated by

activities in Area B of the Presidio, including the cumulative actions.[62] Under Alternative 2, the Main Post would contribute 31 percent of the daily person and vehicle trips generated by Area B. Compared to Alternative 1, the additional PM peak hour vehicle trips generated by Alternative 2 would represent a 10-percent increase in PM peak hour traffic generated by Main Post uses and ultimately a 3-percent increase in future PM peak hour traffic generated throughout the Presidio (Area B).

The transportation network outside the Presidio was assumed to be that presented in the latest San Francisco County Transportation Authority (SFCTA) model, which includes Doyle Drive. However, there are foreseeable modifications to the transportation network in San Francisco that could potentially affect transportation conditions in the Presidio. The San Francisco Municipal Transportation Agency (SFMTA) Transit Effectiveness Project (TEP) proposal includes terminating all 29-Sunset service at Baker Beach in the Presidio, eliminating 82X service to/from the Presidio, rerouting the 43-Masonic service to connect to the Presidio Transit Center, terminating 28 service at the Golden Gate Bridge, extending 28L service to Van Ness Avenue, and eliminating the Golden Gate Bridge toll plaza stop from the 28L route. Some of these changes were implemented in December 2009, but if the TEP changes for the 28, 28L and 43 routes are implemented, Presidio-based ridership on the 43-Masonic route may increase. Extension of the 28L route into the Marina and increased frequency on this route also may make transit a more attractive transportation mode between the Richmond and Marina neighborhoods and therefore potentially reduce the amount of pass-through traffic in the park.

The SFCTA is developing a number of projects that could also potentially affect transportation conditions in the Presidio, although there is not yet a study or analysis of these projects that provides sufficient details to understand the potential impact of these projects or of the TEP:

- Environmental analysis of the Van Ness Avenue Bus Rapid Transit (BRT) project was initiated in March 2007 with a scoping period held in September and October 2007. Preparation of the draft EIR/S for the Van Ness Avenue BRT is currently underway and scheduled to be released in late 2010.
- The Geary Boulevard BRT NEPA Environmental Impact Statement (EIS) and California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) scoping comment period concluded in December 2008. Preliminary engineering is expected to be complete in 2011.

The potential for any of the actions within the alternatives to coincide with construction or implementation of other cumulative actions would increase the likelihood that Presidio residents, visitors, and employees may experience temporary traffic delays and other inconveniences (such as noise) associated with construction activities and would need to use other roadways in the Presidio to reach their destinations. The potential for increased delay and congestion would depend on the timing of construction activities associated with each project. The contribution of

[62] *The level of activity in Area A of the Presidio is generally expected to remain unchanged, although the level of activity in Crissy Field (Area A) is expected to increase slightly due to the planned expansion of programs and activities at the Gulf of the Farallones National Marine Sanctuary. The effect of the modest increase in traffic traveling to and from Area A would be negligible compared to the 2030 transportation conditions described in Section 3.3 of the final SEIS.*

the proposed Main Post actions to these cumulative effects would be minimized through preparation and implementation of construction traffic management plans for individual projects. Additional measures would also be implemented to eliminate or reduce potential impacts (such as public awareness campaigns and increased transit service). At a minimum, in each case, detour and/or other signs would be posted to inform drivers of conditions. Certain areas within the Main Post would be used for construction staging, and people coming to the Presidio may have to park farther away from their destinations.

Parking

Alternatives 2 and 3 would provide sufficient parking within the Main Post district to accommodate expected demand. Alternatives 1 and 4 would have a parking deficit. Under Alternatives 1 and 4, motorists may find parking in the nearby Crissy Field or Letterman planning districts, and make parking more difficult to find in those districts. The Crissy Field district is adjacent to Area A, and spillover effects crossing the Area A/B jurisdictional boundary would be addressed through PTMP EIS Mitigation Measure TR-21 *Presidio-Wide Parking Management.*

Some special events would generate additional cumulative demand for parking beyond that of a typical weekday. Under all alternatives, some excess supply would be available on weekends to accommodate special events. As required by PTMP EIS Mitigation Measure TR-24 *Special Event Parking Management*, special events would need to be scheduled and coordinated according to parking availability and events would be regulated to ensure the adequate parking supply is available to meet cumulative demand.

As required by PTMP EIS Mitigation Measure TR-19 *TDM Program Monitoring*, the Trust would implement a transportation demand management (TDM) program within the district and throughout the Presidio to reduce automobile usage and associated parking demand by all tenants, occupants, and visitors. The availability of alternative transportation modes and the Trust's TDM program provide mitigation measures for these potential indirect environmental effects. The Trust would monitor implementation and effectiveness of the TDM program on an ongoing basis. If TDM goals are not being reached, the Trust would implement more aggressive strategies or intensify components of the existing program, such as requiring tenant participation in more TDM program elements, increasing parking fees, and providing more frequent and/or extensive shuttle service.

Air Quality

None of the alternatives would be inconsistent with the most recent Clean Air Plan (CAP) or cause significant regional air emissions beyond those that were anticipated under the PTMP. Regional growth, land use trends, and transportation projects that are outside the control of the Trust, however, could exceed the levels assumed in the CAP. These projects must be considered in conjunction with PTMP-related growth when assessing cumulative effects. Therefore, the analysis of cumulative effects in the final PTMP EIS determined that cumulative air impacts would be significant. Cumulative actions within the Main Post district would contribute to regional growth but not significantly to localized air quality impacts.

Localized air quality impacts and carbon monoxide (CO) concentrations are based on traffic volumes that combine project traffic with

background traffic, which is projected to increase over time. In this way, this analysis takes into consideration cumulative effects on local air quality. Air quality impacts from motor vehicle emissions and other operating-phase emissions (see Table 21) would contribute to ongoing violations of federal or state ambient air quality standards for ozone, particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5) in the region. Cumulative emissions under Alternative 2 would cause no more than about 15 pounds per day of ROG, NOx, PM10, or PM2.5 (net of Alternative 1 in Table 21) in addition to those anticipated under the PTMP. To minimize the cumulative effects of these emissions, the Trust would ensure that all alternatives would be consistent with the regional CAP by requiring implementation of the TDM program (PTMP EIS Mitigation Measure NR-21). Additionally, any new stationary sources associated with the alternatives would either be exempt from or subject to Bay Area Air Quality Management District (BAAQMD) permitting regulations and requirements, which would ensure consistency of those emissions with the State Implementation Plan (SIP) and CAP.

Short-term emissions from construction activities could cause cumulative air quality effects if other nearby projects were to be under construction at the same time. Improvements to the Main Parade and other rehabilitation or new construction in the Main Post district would contribute additional construction-related emissions. In the vicinity of the Main Post district, reconstruction of Doyle Drive would cause dust and construction equipment exhaust simultaneously with demolition or construction phases of actions being considered under the alternatives. Implementing the measures specified in the final Doyle Drive EIS/R and the final PTMP EIS would be part of project implementation and would reduce the cumulative impacts of construction dust and exhaust emissions.

Noise

Noise from Main Post district development, including construction/demolition activity and operational traffic noise, would coincide with ongoing use and occupation of the park. Noise from other construction projects, such as the reconstruction of Doyle Drive, would combine with construction/demolition noise from Main Post development. There may be times when construction noise could interfere with indoor activities in nearby uses adjacent to project sites. Noise impacts could be intermittently disruptive or annoying to persons nearby, but, they would be temporary in nature and limited to the period of construction. All construction activities would be conducted in compliance with the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code), which prescribes working times, types of construction equipment to be used, and permissible noise emissions.

Reconstruction of Doyle Drive would result in potential construction noise impacts on the north end of the Main Post. Occurring over a period of multiple years, construction noise would be intermittent, and the level would vary depending on the type, location, and length of the activity. Construction would cause noise levels of 70 to 80 dBA at a distance of 100 feet and range from the mid- to upper-80s dBA at locations within 100 feet of the project construction limits. Construction equipment would operate in a limited area and then move along the alignment until the completion of the project. Implementing the measures specified in the final Doyle Drive EIS/R and the final PTMP EIS would reduce negative noise effects. Doyle Drive reconstruction is not expected to

create any permanent noise impacts, as traffic noise would not differ noticeably from present conditions and may improve.

The cumulative effects of other foreseeable changes in traffic noise were analyzed in the final PTMP EIS (page 369) and were found to be minor. Various locations, including areas along Lincoln Boulevard, the San Francisco National Cemetery, and the residences along Riley Avenue nearest to Sheridan Avenue, would experience increased noise from traffic generated by cumulative actions. Cumulative peak hour traffic noise at entry gates where the PTMP anticipated 67 to 69 dBA (Lombard and Presidio gates) would be limited to less than a one-decibel increase. While traffic volumes would increase noise above background levels, the increase would not be substantial (i.e., would not exceed applicable standards) and would not warrant mitigation (except the current practice of enforcing noise insulation requirements equivalent to the standards of Title 24 to provide an acceptable interior noise environment following building rehabilitation or new construction). The Trust would review final building plans to ensure that building walls, floor/ceiling assemblies, and windows meet the standards regarding sound transmission.

Historic Resources

The actions of the mitigated preferred alternative (Alternative 2) and Alternative 3 have the potential to affect the National Historic Landmark District (NHLD). With the exception of the removal or relocation of Buildings 40 and 41, the majority of the projects would not have significant impacts – and many, such as building and landscape rehabilitation would have beneficial impacts.

The alternatives would contribute to the overall level of change within the NHL since the writing of the 1993 NHL update, inclusive of projects planned within the foreseeable future. Since 1994, two major projects have been executed, and a third has been recently initiated, in the northeastern quarter of the Presidio. The rehabilitation of Crissy Field (completed in 2001) removed 32 historic buildings to restore earlier historic and natural features and to introduce parking for recreational activities. The construction of the Letterman Digital Arts Center (completed in 2005) replaced non-historic buildings and a large parking lot with compatibly designed new buildings and landscape. The replacement of Doyle Drive (which began construction in 2009) will replace the historic elevated roadway with a new parkway, remove historic buildings and streets, and alter the appearance of the existing bluff to accommodate the parkway. All three of these projects have had or will have impacts on the NHLD due to removal of contributing resources and the introduction of new buildings. Two alternatives would contribute to this cumulative impact by removing or relocating three historic buildings (Alternative 2) and two historic buildings and a historic structure (Alternative 3), and adding new elements that would change the appearance of the Main Post.

The Main Post is important as the only area of the Presidio that includes all eras of history as well as the original resource that resulted in the designation of the Presidio as an NHLD (El Presidio archaeological site). Alteration or removal of the qualities that chronicle the history of this area have the potential to adversely affect the NHLD as a whole, which would constitute a significant impact. The sum of the cumulative actions described below, including Crissy Field rehabilitation, the Letterman Digital Arts Center, the Doyle Drive replacement, as well as the analyzed

alternatives, would cumulatively alter the appearance and character-defining elements in large areas of the NHLD.

Implementation of project parameters, district-wide and site-specific design guidelines, and other stipulations resulting from Section 106 consultation would ensure that new construction is compatible with the historic district, minimizing impacts on the historic scene. Future proposals would adhere to PTMP EIS Mitigation Measure CR-4 *Future Planning to Guide Demolition and New Construction* to ensure that appropriate analysis is undertaken and public input considered to protect the NHLD. These cumulative impacts on historic resources are discussed in more detail below.

Establishing Cumulative Adverse Effect on the National Historic Landmark District One of the first requirements of the federal regulation (36 CFR 800 Protection of Historic Properties) implementing Section 106 of the National Historic Preservation Act (NHPA) is to determine and document the Area of Potential Effects (APE) for each project or undertaking that a federal agency proposes. Establishing an APE includes consideration of a broad range of effects (e.g., construction disturbance or physical changes to character-defining elements, or the introduction of new elements into an historic district). Multiple projects or undertakings occurring in the same planning area would have, at a minimum, overlapping APEs and more likely all projects would have the same APE. It was determined in previous environmental reviews (Main Parade EA and International Center to End Violence EA) that the Main Post is the APE for the projects or undertakings in this district. During Section 106 consultation on the actions described in the draft SEIS, the APE was expanded to include the entire NHLD so that the scale and scope of the SEIS would be adequately addressed (see Figure 15).

Because the Presidio is a National Historic Landmark, the Trust is required "to the maximum extent possible [to] undertake such planning and actions as may be necessary to minimize harm to" the landmark.[63] In response to the NHPA requirements and to establish a threshold for minimizing harm to the NHLD, the Trust has developed planning and guidance materials in several separate documents. The PTMP included management principles to "guide future actions and decisions" and to ensure the long-term preservation of the NHLD. The PTMP further included planning concepts and guidelines for all districts in the Presidio, including the Main Post. Shortly after release of the PTMP, the Trust developed the Main Post cultural landscape assessment (CLA), which both identified the historic sensitivities and provided treatment and planning recommendations that, if followed, would ensure the consistency and compatibility of new projects in the Main Post district. The Trust plans to update its cultural landscape documentation and district-wide planning and design guidelines in order to support these ongoing efforts.

In collaboration with participating agencies and interested parties in the Section 106 consultation, the Trust has worked to avoid, minimize, or mitigate adverse effects of the proposals by developing project parameters and processes for continued consultation on the design and implementation of several projects under the Main Post Update. These measures are described in the Programmatic Agreement for the Main Post Update (PA-MPU) that resolved the Section 106 consultation. The PA-MPU is provided in Appendix B.

[63] *NHPA Section 110(f), 16 USC 470h-2(f).*

Building Rehabilitation Building rehabilitation for compatible new uses requires minimal alteration of the character-defining materials, features, spaces, and spatial relationships of the buildings and their settings. Reuse and rehabilitation of historic buildings on the Main Post and within the NHLD would ensure the preservation of these resources while meeting the National Historic Preservation Act (NHPA) mandate for preferential use of historic properties over new construction. Alternatives 1, 2, and 3 would contribute to these efforts through rehabilitation of the remaining historic buildings in the Main Post. Other cumulative actions planned in the NHLD that include rehabilitation are, the Thornburgh historic buildings in the West Letterman area (Buildings 1040, 1047, 1050, 1056, 1059, 1060, 1062, 1162, 1163, 1167, 1169, and 1170), and the remaining historic or eligible buildings at West Crissy Field (937, 935, 934, 926, 920).

Overall, the rehabilitation of historic buildings that has occurred since 1994, combined with the proposed rehabilitation projects, would have a beneficial impact on the Main Post and the NHLD as a whole.[64]

Stabilization and Maintenance[65] The Main Post district has experienced few and limited problems with building stabilization and maintenance, due in large part to a high level of occupancy that deters vandalism. The Public Health Service Hospital, which had been vacant for more than 20 years, experienced considerable vandalism and deterioration. Rehabilitation of Buildings 1801, 1808, and the Wyman Avenue residences (1809-1815) reversed the problems and revitalized the Public Health Service district. Locating Park Police and other functions at Fort Scott has significantly reduced vandalism in this area. Furthermore, the Trust initiated a substantial three-year preservation maintenance program in 2008 to secure the envelopes of the Fort Scott buildings. These stabilization activities would continue to have a beneficial impact on the NHLD.

Demolition Forty-two historic buildings have been demolished in the Presidio since the property transferred from the U.S. Army in 1994.

[64] *Other substantial rehabilitation projects that have been completed at the Main Post include Upper Funston buildings and landscape (Buildings 11-16), Riley Avenue, Infantry Terrace and Presidio Avenue homes (Buildings 123-129, 325-345, and 56-59), the two Civil War barracks (Buildings 86 and 87), the Post Office (Building 210), the old Military Police Headquarters (Building 36), the Bay School of San Francisco (Building 35), the Presidio Internet Partners (Building 38), the San Francisco Film Centre (Building 39), and the Walt Disney Family Foundation Museum and Offices (Buildings 104, 108, and 122). In all, 56 of the 110 historic buildings on the Main Post either have been or are under construction to be fully rehabilitated.*

(continued)

Presidio-wide, 226 of the 428 historic buildings have been fully rehabilitated.

[65] *"Benign neglect" can lead to some of the most serious preservation problems, as lack of maintenance allows the deterioration of a building's weatherproof envelope. The continuing program of stabilization and maintenance that has been implemented in the Presidio, first by the NPS and then by the Trust, has significantly reduced the amount of deterioration that might have been anticipated with many historic buildings standing vacant over a period of years after the transfer from the U.S. Army. The Trust instituted a stabilization program a few years after it was legislated and has stabilized approximately two to three vacant historic buildings each year since 2003. The size of the building and the remoteness of its location have proven to be two of the most difficult problems in preventing either water penetration or vandalism.*

Thirty-two of these were demolished by the NPS for the Crissy Field restoration. Other demolished buildings were located in various districts around the NHLD. The Doyle Drive project has demolished building 670 and will remove or alter an additional three historic buildings (Buildings 201, 204, and 230) to allow construction of the new parkway. Of those buildings demolished by the Doyle Drive project, the top half of Building 201 will be reinstalled and rehabilitated on Halleck Street in order to maintain the historic streetscape. Alternative 2 includes the demolition or relocation of three historic buildings. Building 46, slated for removal in order to rehabilitate neighboring Buildings 47 and 48 for the archaeology lab and curation facilities, is a 50-square-foot shed located in a service alley behind Building 49. Demolition of Buildings 40 and 41 to facilitate the interpretation of El Presidio would constitute an adverse effect to those individual resources, as well as an adverse effect to the NHLD. As two of five remaining buildings constructed during World War II at the Main Post, and two of 15 buildings remaining of the "temporary" type in the Presidio, the removal of Buildings 40 and 41 would diminish the integrity of the NHLD due to the relative scarcity of similar resources in the landmark today.[66] Removal of these buildings, however, would facilitate the interpretation and commemoration of the El Presidio archaeological site, thus having a beneficial effect on the Spanish Colonial era of history at the Presidio. More intact examples of World War II-era "temporary"-type construction also exist elsewhere in the Golden Gate National Recreation Area (of which the Presidio is a part), such as Fort Cronkhite in Marin County. Relocation of Buildings 40 and 41 to another site in the Main Post or elsewhere in the Presidio would adversely affect the two buildings but would also reduce this impact to a less-than-significant level, as the overall inventory of "temporary"-type buildings in the NHLD would not change.

New Construction Cumulative actions with new construction of note at the Main Post include the courtyard infill additions between the "wings" of Buildings 100 and 104 as executed in the Walt Disney Family Museum and underway in the International Center to End Violence projects, new construction associated with the lodge and cafe on and around the Building 34 site, the addition to the Presidio Theatre, the addition to the Presidio Chapel, and the addition for the archaeology lab and curation facilities.

The International Center to End Violence proposal for Building 100, including the courtyard addition, was certified as meeting the Secretary of the Interior's Standards through the review process for the federal historic preservation tax incentives. This certification is equivalent to a finding of no adverse effect under the Section 106 process. Construction of a new infill addition at the Building 104 courtyard as part of the Walt Disney Family Museum was determined to have no adverse effect through the Section 106 process for that project.

[66] *According to the 1993 NHL update, "all of the 'temporary'-type buildings associated with the World Wars stand out at the Presidio as architectural anomalies, providing striking evidence of the world-wide upheaval and national emergency that necessitated their ascetic design and forced placement" (NPS 1993, page 8-52). The 1993 update goes on to note that the "most intact group…of these buildings stands on Crissy Field" (NPS 1993, page 7-59). This group, however, was removed in 2001 for the rehabilitation of Crissy Field, thus leaving only smaller collections of the "temporary" type buildings at the Main Post, Fort Scott, and the North Cantonment.*

The new construction as currently envisioned under the mitigated preferred alternative (Alternative 2) would avoid or minimize adverse effects on associated buildings and open spaces through the application of project parameters, design guidelines, and additional consultation. The proposed lodge would reinforce the historic separation between the Old and Main Parades using a series of buildings, connected by outdoor passages, arranged in the pattern of historic development of the site, and lower than the remaining historic barracks (Buildings 86 and 87). New additions to the Presidio Theatre and Presidio Chapel would support the rehabilitation of those buildings for their historic uses; scale, massing, and connections to the historic buildings would be directed by historic structures reports (HSRs), site-specific and district-wide design guidelines, and additional consultation. Small-scale (500-square-foot) new construction between Buildings 47 and 48 would facilitate the rehabilitation of the historic garages and provide a secure entrance for the archaeology lab and curation facilities, without adversely affecting the garages or the historic scene.

The mitigated preferred alternative has been the subject of a Section 106 (NHPA) consultation. Extensive consultation among the consulting parties resulted in measures to avoid, minimize, or mitigate adverse effects that had been identified in the final FOE (August 2009).

Cumulative actions with noteworthy new construction outside the Main Post include the Letterman Digital Arts Center; the addition to the rear of the hospital (Building 1801) and the Belles Street housing units in the Public Health Service district; and the new parkway replacement for the historic Doyle Drive, which would introduce a large new roadway structure and associated viaducts into the historic landscape. Compatibility and landscape protection guidelines established through separate consultations on those projects are being applied to further reduce the effects of these actions on the NHLD.

The Public Health Service Hospital project included a three-story addition on top of the rear portion of Building 1801 and a free-standing seven-unit apartment building. It underwent review through the federal historic preservation tax incentives review process and achieved certification for tax incentives, indicating a no adverse effect determination for the project.

Reconstruction of Doyle Drive would result in an adverse effect on the Presidio National Historic Landmark District by:

- Introducing new structural and visual elements (i.e., viaducts, tunnels and an at-grade parkway) that would not resemble the existing historic Doyle Drive facility in overall location, massing, and scale;
- Requiring the destruction of contributing elements, including Buildings 201, 204, 230, and 670 (see above discussion under Demolition) and Doyle Drive itself; and
- Altering contributing roadways, including Young Street, Halleck Street, Gorgas Avenue, Crissy Field Avenue, Girard Road, and Vallejo Street.

Appropriate measures have been negotiated among the cooperating agencies and are finalized in a programmatic agreement (Doyle Drive PA) that addresses resources potentially affected by the Doyle Drive project. The Built Environment Treatment Plan (BETP) required by the Doyle Drive PA establishes treatments for resources and landscape elements that would remain following reconstruction of Doyle Drive while also describing treatments for the replacement of historic buildings

and features that would be removed to make room for the new parkway. Implementing treatments identified in the BETP present opportunities to meet the cultural resource management goals for the Presidio NHLD, including interpretation, treatment, preservation, rehabilitation, and restoration, that would contribute to beneficial cumulative impacts while avoiding, minimizing, and mitigating the adverse effects.

New construction in the Presidio under the cumulative actions described above would alter the association, setting, and feeling of the historic resources within the NHLD. Although certain "aspects of integrity"[67] would be diminished, the vast majority of individual historic properties would endure as contributing resources.

Adherence to PTMP EIS Mitigation Measure CR-4 *Future Planning to Guide Demolition and New Construction* would ensure that the appropriate process is followed to consult on future proposals in order to prevent further significant impacts. The Main Post Update expands concepts, measures, and criteria in the PTMP intended to avoid, minimize, mitigate, or otherwise address adverse effects. The Trust has ensured that building rehabilitation, new construction, and landscape treatments at the Main Post would be subject to terms identified through the PA-MPU and the 2002 PA.

Landscape, Parking and Circulation Changes Improvements at the Main Parade would rehabilitate the existing seven-acre parking lot to create a green open space "heart" of the Main Post. Proposed improvements would recognize the historic military order in the landscape and would include opportunities for interpreting the Presidio's history. Existing site features would be incorporated, and important historic spatial and visual relationships, including the boundaries of the parade ground and the relationships between buildings and open spaces, would be reinforced. Returning or reinforcing historic character-defining elements that have been removed or have deteriorated through time would strengthen the association, setting, and feeling of the historic Main Post area.

Restoration of the historic airfield under the NPS Crissy Field project returned a landscape feature to the historic scene. The project also incorporated design compatibility measures for new landscape improvements. Removal of 32 historic buildings was, however, determined to have adverse effects on the individual resources, but not on the NHLD.

Enhancement of upper Tennessee Hollow would incorporate measures to rehabilitate the historic landscape as well as restore natural systems, and is not anticipated to have an adverse effect on the historic landscape. The landscape rehabilitation at the Public Health Service district in association with the conversion of the hospital building into residential units had no adverse effect on individual historic resources or the NHLD as a whole.

The mitigated preferred alternative (Alternative 2) would include complete or partial conversion of five historic roadways to serve as parking lots or pedestrian walkways, the construction of two new surface parking lots and potentially an underground garage/surface lot. Measures incorporated into these proposed changes to historic circulation patterns and other landscape modifications (width, alignment, and paving materials would be historically compatible) would not significantly

[67] *As defined in the National Register Bulletin, How to Apply the National Register Criteria for Evaluation (NPS 2002).*

impact the cultural resources of the NHLD. Traffic signals will not be installed in the Main Post.

Landscape improvements associated with the lodge and the theatre and chapel additions would be minimal and could help minimize the impact of new construction through vegetation screening. Other historic landscape improvements considered under the mitigated preferred alternative include rehabilitation of the Alameda, Lower Funston Avenue and the streetscape in front of the Montgomery Street Barracks. These projects would conform to the Secretary of the Interior's Standards. Thus, the cumulative landscape improvement projects would not have an adverse effect on the historic landscape of the Presidio. Successful rehabilitation of the landscape would strengthen the association, setting, and feeling of the historic Main Post area and would have a beneficial effect on the NHLD.

Archaeology

While some other archaeological features have been unavoidably affected, the archaeology of the Presidio has benefited from the following cumulative actions to date through project-specific identification efforts that have increased the understanding and preservation of these buried resources:

- The NPS Crissy Field project identified a Native Ohlone prehistoric site (SFr-129) and adapted the design of the new marsh to avoid impacts, while other previously unidentified historic features in the project area were subject to data recovery prior to their destruction.
- The Letterman Digital Arts Complex development identified no contributing features in that location and had no impacts during construction.
- The transformation of Tennessee Hollow has resulted in the further identification of several Spanish Colonial- and Mexican-era features at El Polin. These locations are being preserved and actively researched with continuing project designs incorporating representative features into the landscape and interpretive themes.
- The Main Parade project has been planned to avoid impacts on archaeological features in the project area and will undertake further identification efforts in the near future to inform continuing designs.
- The rehabilitation of the Public Health Service Hospital identified the location of portions of the original Marine Hospital in that location. Impacts on this feature were avoided through a design that preserved remains in their original location.
- Impacts on archaeological resources due to replacement of Doyle Drive were addressed in the NHPA consultation for the project and a programmatic agreement has been executed. In the planning phases for Doyle Drive, the identification effort verified the location of a previously recorded Native Ohlone prehistoric site (SFr-6/26), which is being preserved in place. Identification efforts for historic archaeological features did not encounter additional features, but the scale and scope of the project will likely mean that historic-period features that contribute to the landmark will likely be unavoidably affected. These impacts will be mitigated in accordance with an archaeological treatment plan that calls for data recovery.

Initiatives completed on the Main Post have enhanced public awareness of and implemented conservation strategies to preserve the site of El Presidio, the cornerstone archaeological site in the park. These include:

- Showcasing the history of the last standing adobe from El Presidio by exposing layers of fabric encapsulated in the Mesa Room of the Officers' Club;
- Developing several education opportunities for local schoolchildren to learn about and experience the archaeology of El Presidio and the Main Post in a manner that helps the students and their teachers meet core curriculum standards in California schools;
- Protecting the eastern façade of El Presidio's 19th-century quadrangle as well as important archaeological features outside of the colonial walls to permit future scientific investigations while remediating lead-contaminated soils around the upper Funston Avenue Officers' Quarters (Buildings 11 through 16);
- Developing an interpretive landscape to protect and represent the colonial foundations of El Presidio's chapel and bring the site to life for the public;
- Removing landscaping that requires irrigation from most of the southern façade of El Presidio along Moraga Avenue and from the rear yards of the upper Funston Avenue Officers' Quarters to avoid impacts on the archaeological features; and
- Reusing existing utility trenches, to the extent feasible, during upgrades to the infrastructure within the archaeologically significant areas of El Presidio.

The relocation of the Presidio Archaeology Center to the Main Post and expansion of its program under Alternatives 1 and 2 would further benefit the site of El Presidio, continue to increase public awareness of this archaeological resource, recover data of archaeological significance, and provide for on-site curation of archaeological collections and associated records. However, new construction, building demolition, infrastructure upgrades, and roadway reconstruction associated with Alternatives 1, 2, and 3 could affect archaeological sites and features that contribute to the NHLD. These impacts include effects on contributing archaeological features of the NHLD dating from the Civil War era and the turn of the 20th century. Actions at the Main Post could also adversely affect unknown sites that may be identified through continuing identification efforts or an unanticipated discovery.

The Trust currently requires archaeological review before undertaking or permitting ground-disturbing activities. Any ground-disturbing activities that may affect potential or known archaeological sites would be assessed in the planning phases and subject to a range of requirements, including but not limited to avoidance of the sites, further identification measures, monitoring, and testing and/or data recovery. Some testing and all data recovery would require review under the NHPA as stipulated in executed programmatic agreement documents. Archaeological testing and research for scientific and/or educational purposes is stipulated in the 2002 PA and the PA-MPU, and may proceed without additional consultation provided they follow the adopted processes.

Visual Resources

Under the cumulative actions, visual changes that would occur within the Main Post and elsewhere within the park would be incremental and

localized. Key views within the Presidio would be protected or enhanced, as would views of the Presidio from adjacent areas. Rehabilitation of historic buildings would create a beneficial visual change, as would selective building removal (as at El Presidio). New construction would be limited, but where allowed it would be compatible with the visual setting.

Restoring the Main Parade and reinforcing the edges of the historic open space through new design features would complement the rehabilitated historic buildings and could improve visual quality by reducing pavement, removing cars, and introducing grass and other compatible materials. Main Parade improvements would also allow for opportunities to enhance physical and visual connections to Crissy Field when Doyle Drive is replaced.

Restoration of upper Tennessee Hollow would improve the existing visual setting by expanding natural habitat areas. The restoration would form a unique visual backdrop and ecological corridor in the developed environment.

Removal of the 1950s wings of the hospital building at the Public Health Service district allowed for the restoration of the building's 1930s main facade and entry, which substantially improved the visual integration of the site with the neighborhood. Replacing a 10-story concrete hospital and adjacent research facility with four three- and four-story buildings (with underground parking) arranged around a seven-acre landscaped open space has had a major beneficial effect on the Letterman district's visual setting near the Lombard Gate.

The realignment of Doyle Drive would generally improve views of the shoreline and bay from the Main Post by placing portions of the roadway at or below ground level and eliminating the visual and physical barrier created by the current elevated structure. However, Doyle Drive construction activities would require the presence of substantial amounts of equipment during this three- to four-year process and would include grading, the removal of plants and trees, and demolition of existing structures, resulting in a noticeable visual change.

Visitation

Expanded facilities and programming under the alternatives (except Alternative 4) and cumulative actions would increase visitor use and add to the visitor experience offered at the Presidio. Facilities would continue to be concentrated in the Main Post and at Crissy Field (both Areas A and B). As buildings are rehabilitated, they would host new park tenants and programs. Visitors would be accommodated by diverse park programs and exhibits, food and retail services, wayfinding directions, interpretive media, museum collections, and lodging. Adequate infrastructure would be in place at the Main Post to accommodate visitor parking. Visitors would be informed in advance where to park and would find spaces proximate to use areas. Visitors on foot and bicycle would enjoy more places that would be virtually free of motor vehicle traffic, and non-vehicle use of these areas would increase. The Main Post's transit center would provide many visitors with a stronger sense of arrival to the park (public restrooms, waiting areas, connections to public transit, and information about what to do in the park). Shuttle buses would be provided at the frequency required to meet demand, and bus riders would be served at the transit center. Improved facilities would benefit most visitors by providing clearer information, and convenient access to the park's shuttle system.

Visitors would benefit from the following opportunities and services offered by the cumulative actions:

- Improvements to the Main Parade would rehabilitate the existing seven-acre parking lot to create the green open space "heart" of the Main Post to accommodate an array of new public uses, including historical re-enactments, performances, special events, and everyday activities. Pedestrians and bicyclists would find the Main Parade and some streets free of vehicles, and non-vehicle use of these areas would increase.
- The lodging facility at the Main Post would improve visitor services, provide an opportunity for overnight visitor accommodation and ancillary services, and help establish the district as a vibrant and welcoming visitor destination.
- The Heritage Center and Presidio Archaeology Center would provide opportunities to more deeply engage many park visitors in Presidio history.
- Programming and tenant selection for the Montgomery Street Barracks would locate cultural uses and visitor-serving retail in the ground floors of these buildings.
- The Walt Disney Family Museum contains archival material and holds exhibits to communicate the vision and legacy of Walt Disney within a historical context to school/educational groups and others.
- The El Presidio site would create a compelling destination for visitors to learn about archaeology and would provide opportunities to commemorate this cornerstone of the park and the birthplace of San Francisco.
- Restoration of the upstream portion of Tennessee Hollow would provide trails, smaller pathways, seating, landscaped areas, and interpretive components, and would provide recreational benefits of a more naturalized landscape (nature walks, birdwatching, ecological stewardship, photography, painting, etc.) to improve the visitor experience. Following restoration, the downstream Quartermaster Reach portion of Tennessee Hollow would include a pedestrian trail, spur trail, overlook, and trailhead to allow visitor use and enjoyment of the site.
- Reconstruction of Doyle Drive will provide a new compatibly-designed Presidio entrance (Girard Avenue) in the northeastern part of the Main Post to serve as the main vehicular entry for tenants and visitors to the district. It will also increase open space at the Main Post by about 10 acres by recreating a bluff overlooking Crissy Field. This new space will be landscaped and will contain trails and overlooks that link to the existing Presidio trails system.
- The new 7,200-square-foot, interim Crissy Field Center at the easternmost end of Crissy Field (Area A) allows the community environmental center to continue its programs and workshops that serve school groups, community organizations, and the general public during Doyle Drive replacement.

During the construction periods for cumulative actions, the visitor experience at the Main Post would be degraded as the normal scenic and tranquil setting would be disrupted by the sights and sounds of construction. However, visitors would still have full access and use of the facilities within the Main Post and other districts in the park.

Cumulative actions would be expected to attract between 1.11 million (Alternative 4) and 1.69 million (Alternative 2) visitors annually to the Main Post. During peak visitor use days (summer weekend days and holidays), the cumulative actions could cause some visitors desiring quiet or less social experiences to opt to visit another part of the park, or visit the Main Post at another time or on another day. While some visitors could notice a change from a mostly deserted to a more lively district during peak visitation times, the desires of most visitors would be better met through the range of opportunities that would be available. The Trust currently imposes management controls within property leases (such as parking restrictions, TDM, compliance with sustainability programs and conservation practices, visitor education, and public access and interpretation requirements) to ensure that the Presidio's resources and the overall quality of the visitor experience are protected. Among other management controls discussed in Section 3.9, the Trust would continue to monitor visitation levels to ensure that park uses are not cumulatively resulting in unacceptable impacts on Presidio resources, including visitor experience. Monitoring is being conducted by using a number of methods, including visitor and vehicle counts, resource surveys, site inspections, and visual observations. If, as a result of monitoring, it is determined that an ongoing or proposed use would cause unacceptable impacts on park resources, adjustments would be made to the way the use is conducted, including placing limitations on the use, so as to mitigate the unacceptable impacts. This would be committed to and enforced by the Trust as part of its mitigation program and NEPA administrative record.

Recreation

Alternatives 3, when added to past development of the Letterman Digital Arts Center within the Letterman district, would result in the closure of three Presidio Community YMCA-administered tennis courts in the Presidio. Should these courts not be replaced due to lack of funding, their loss would represent a notable decrease in active recreational space for tennis players at the Presidio, which would affect Presidio Community YMCA tennis facilities and programs. Activities that may occur in the city, specifically, the short-term unavailability and long-term reduction of public courts in Golden Gate Park, would incrementally contribute to the identified adverse cumulative impact on existing tennis facilities and programs in the Presidio and San Francisco. Alternatives 1, 2, and 4 would not contribute to the additional loss of tennis courts at the Presidio.

The ballfield proposed as part of Alternative 2, in combination with the Tennessee Hollow project, would increase the number of playing fields in the Presidio. The Trust would work with the City and County of San Francisco to expand and upgrade Julius Kahn Field as a multi-use field that can accommodate high school soccer or Little League play. The opportunity to build a new field at Fill Site 1 would become available once remediation of the site is completed. Following remediation of the landfill at Pop Hicks, it would also be restored as a playing field. Other field upgrades and improved recreational facilities are planned for the watershed as remediation and creek restoration continue.

Water Resources

Implementation of the alternatives, when combined with the impacts of cumulative actions, would likely improve water quality within the

Northeast watershed of the Presidio. With the exception of the Public Health Service Hospital project, all of the cumulative actions are located within the Northeast watershed and, therefore, have related impacts on water resources. Impacts from building and rehabilitation projects when implemented with required mitigations and Best Management Practices would not be significant. The Tennessee Hollow, Main Parade, and Letterman Digital Arts Center projects either have removed or propose to remove large amounts of impervious surfaces, which would benefit water quality and storm drainage by reducing the peak flow from storm events, reducing non-point source pollution, increasing infiltration, and slowing water flow velocities. The Tennessee Hollow project would remove fill material (Morton Street Field), restore the original creek channel of the eastern tributary of the watershed, and remove impervious surfaces. The project would also provide approximately 22 acres of habitat enhancements in all three reaches (removing non-native vegetation such as eucalyptus and replanting with native plants), and would provide area for temporary stormwater detention. Improvements to the Main Parade would be of particular value because a large source of non-point source pollution would be eliminated. Parking displaced by Main Parade improvements would be replaced at multiple sites throughout the district, including underground parking, and would incorporate post-construction Best Management Practices (BMPs) to address water quality. The Letterman Digital Arts Center project resulted in a major decrease in impervious surface and stormwater flow at the site (compared to its former configuration) and improvement of water quality from stormwater runoff.

Reconstruction of Doyle Drive, which runs across the north end of the watershed, will significantly change the hydrology of the watershed. Doyle Drive stormwater runoff is currently discharged to existing drainage facilities without treatment. Approximately 25 percent of the planned roadway will be in tunnel segments, which will reduce the total area of impervious surface subject to stormwater runoff.[68] This will result in the reduction of total runoff volume and will also likely result in a reduction of pollutant loading associated with the roadway. The co-lead agencies for the project are currently reviewing various proposals to treat, contain, and discharge residual water collected within the tunnel during storms or during washdown (cleaning the tunnels). The various options being considered for stormwater treatment will provide a net benefit to stormwater runoff quality and the quality of receiving waters.

REFERENCES

National Park Service (NPS). 1993. *1993 Update to the National Register of Historic Places Registration Forms for the NHLD*. Golden Gate National Recreation Area, California. Dated October.

NPS. 1996. *Crissy Field Plan, Golden Gate National Recreation Area EA.* Prepared by Jones & Stokes Associates, Inc. Dated June.

NPS. 2002. *How to Apply the National Register Criteria for Evaluation.* National Register Bulletin.

NPS. 2009. *Crissy Field Center Temporary Relocation Impact Assessment*. Dated June 1.

[68] *The two tunnel segments would be covered with an adequate soil depth to provide infiltration of precipitation.*

Presidio Trust. 2000. *Final SEIS for New Development and Uses on 23 Acres within the Letterman Complex*. Dated March.

_____. 2002. *Presidio Water Recycling Project EA*. Dated March.

_____. 2006a. *Walt Disney Family Museum EA*. Dated August.

_____. 2006b. *Final SEIS for the Public Health Service Hospital at the Presidio of San Francisco*. Dated May.

_____. 2007a. *Main Parade EA.* Dated November.

_____. 2007b. *International Center to End Violence EA*. Dated September.

_____. 2007c. *Tennessee Hollow Upper Watershed Revitalization Project EA*. Dated August.

_____. 2007d. *Letter of Intent to Initiate Public Scoping and Prepare an EA for the Thornburgh Buildings at West Letterman*. Dated April.

_____. 2010. *Quartermaster Reach EA.* Dated September.

San Francisco County Transportation Authority. 2008. *Final Environmental Impact Statement/Report and Final Section 4(f) Evaluation, South Access to the Golden Gate Bridge (Doyle Drive).* Dated September.

3.13 Other Impacts

ADVERSE IMPACTS THAT CANNOT BE AVOIDED

The previous sections describe the environmental consequences of the mitigated preferred alternative and present the measures available to mitigate the significant environmental effects. The following impacts are those that would still occur despite mitigation.

Air Quality (Cumulative Only)

None of the alternatives would be inconsistent with the most recent Clean Air Plan (CAP) or cause significant regional air emissions beyond those that were anticipated under the PTMP. Regional growth, land use trends, and transportation projects that are outside the control of the Trust, however, could exceed the levels assumed in the CAP. These projects must be considered in conjunction with PTMP-related growth when assessing cumulative effects. Therefore, the analysis of cumulative effects in the final PTMP EIS determined that cumulative air impacts would be significant. Cumulative actions within the Main Post district would contribute to regional growth but not significantly to localized air quality impacts.

Historic Resources Impacts (Project-Specific and Cumulative)

Demolition of Buildings 40 and 41 under the mitigated preferred alternative would result in a significant impact on the Main Post district and the NHLD. Other new construction and building demolition components of the mitigated preferred alternative would result in adverse effects on individual resources but would not rise to the level of a significant impact.

The rehabilitation of Crissy Field, construction of the Letterman Digital Arts Center, and replacement of Doyle Drive have had or will have impacts on the NHLD due to removal of contributing resources and the introduction of new buildings. The mitigated preferred alternative would contribute to the significant cumulative impact. Historic American Building Survey (HABS) recordation of the demolished structures and interpretative materials developed to describe the role of lost resources at the Presidio would be conducted but would not reduce the adverse effect on the resource.

Archaeology Impacts (Project-Specific and Cumulative)

Portions of F:9 United States Quadrangle West Side would be damaged or destroyed during construction of the proposed lodge. Portions of F:21 Quartermasters Complex would be destroyed during the construction of a proposed underground parking lot at the Main Post bluff. Because these contributing archaeological features are assumed to have integrity, damage or destruction would constitute a significant impact on the features. The Trust would prepare an assessment prior to undertaking these projects that may recommend further identification. This assessment would be completed early in the planning phases to inform designs that may avoid or minimize these effects. However, unavoidable impacts are likely to remain

and would be mitigated through a treatment plan that includes data recovery (i.e., archaeological excavation prior to demolition in order to recover important information that would otherwise be lost).

New construction, building demolition, infrastructure upgrades, habitat restoration, environmental remediation, and roadway reconstruction associated with foreseeable cumulative actions (including the mitigated preferred alternative) have and could affect archaeological sites and features that contribute to the NHLD. The cumulative actions could also adversely affect unknown sites that may be identified through continuing identification efforts or an unanticipated discovery.

IMPACTS RELATED TO SHORT-TERM USES OF THE ENVIRONMENT AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The CEQ NEPA Regulations require that an EIS include discussions of "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" and "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."[69] In general, these sections of a NEPA document are not included as environmental impacts for which significance is defined and mitigation is recommended.

Short-Term Uses of the Environment vs. Maintenance and Enhancement of Long-Term Productivity

The Main Post is developed space and has not been used for natural resource management or renewable resource production (agriculture or forestry) for the past two centuries. The long-term productivity of the site is therefore defined by its potential to serve human economic or cultural needs, including redevelopment of the site for the proposed uses analyzed in the final SEIS.

During the construction and operation of the mitigated preferred alternative, localized environmental disruption would occur in the form of traffic and associated noise and air impacts. Operation-oriented disruption to the physical environment would include the removal of landscape vegetation, the loss of some vacant land, and the introduction of impervious surfaces. Disruptions to the human environment would include a change in the overall character of the site and displacement of existing recreational facilities and commercial businesses. Disruptions primarily would affect Presidio residents, tenants, and visitors. Residents of surrounding neighborhoods, particularly those located to the immediate east, may also experience increased construction- and operation-related impacts, but not beyond levels anticipated in the final PTMP EIS.

The short-term impacts on the environment would be more than offset by the benefits that the mitigated preferred alternative would generate in the long term. Redevelopment of the site would contribute to the vitality of the greater community and elevate the status of the Presidio. The high-quality development of the mitigated preferred alternative would create an attractive cultural destination that would increase the site's usability for national and international visitors. The mitigated preferred alternative would serve as the focal point for attracting additional tenants and investors, which would directly and indirectly enhance the financial viability of the Presidio and contribute to the preservation of its resources. Finally, the wide array of Main Post projects and initiatives would incorporate sustainable practices to prevent pollution, reduce waste,

[69] *See 42 USC 4332 and 40 CFR 1502.16.*

promote alternative modes of transportation, and minimize greenhouse gas emissions to help safeguard the health of our environment.

Irreversible or Irretrievable Commitments of Resources

The removal of historic structures and contributing elements of the cultural landscape plus the disturbance of archaeological sites would be irreversible (i.e., once they are damaged or destroyed, they are lost forever). However, prior to the removal or disturbance to these resources, documentation and data recovery would be completed, thus maintaining the historical record and limiting the impact to the loss of the physical structure and historic associations.

The use of park land, construction materials, energy, labor, and financial resources to implement the mitigated preferred alternative would also, in a practical sense, be an irretrievable commitment of resources.

NON-SIGNIFICANT IMPACTS

Analysis of the following impacts was found unnecessary to support the comparisons of the alternatives. These impacts therefore require no further analysis in the SEIS.

Global Resources

None of the alternatives would generate large enough quantities of greenhouse gases (GHG) to cause a substantial impact related to global climate change or disrupt California Air Resources Board (CARB) progress on achieving the goals of the California Global Warming Solutions Act of 2006 (AB32) and California State Executive Order S-3-05. The alternatives would cause lower levels of GHG than similar development in a non-urban or suburban setting and lower levels than what historically occurred with military activity in the CARB target date of 1990. Also, the Main Post's demand for electricity would be negligible in the context of overall demand within the Presidio and San Francisco, and the proposals being considered under the final SEIS would not require expansion of any industrial or electricity generation source.

Section 3.4, Air Quality, quantifies the emissions of carbon dioxide and small quantities of other GHG resulting from the alternatives that would contribute to global climate change. Compared to baseline conditions, Alternative 2 would add no more than 6,910 pounds per day of carbon dioxide (CO_2), or roughly 1,260 metric tons of CO_2 per year. The maximum change in annual CO_2 emissions of about 1,260 metric tons due to implementation of proposals within the alternative would be less than 0.001 percent of California's target of 427 million metric tons of CO_2-equivalent (MMTCO2e) in 2020. These emissions would occur due to the motor vehicle trips that would be generated and due to other stationary and area sources including energy consumption. No alternative would cause more than the CEQ's Draft NEPA guidance level of 25,000 metric tons or more of direct CO_2-equivalent GHG emissions per year.

Consistent with applicable law and subject to the availability of appropriations, the Trust is committed to meeting comparable greenhouse gas emission reduction targets as those established for California by State Executive Order S-3-05: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. The Trust would use an environmental management system (EMS) as the primary management approach for establishing these targets and for collecting, analyzing, and reporting of information to measure performance in the implementation of

this measure. The Trust's transportation demand management (TDM) program, air quality mitigation measures, and participation in the Climate Friendly Parks program would reduce GHG emissions related to the mitigated preferred alternative, address the Presidio's (Area B) contribution to climate change, and assist the CARB in achieving the goals of AB32 and Executive Order S-3-05.

Geology and Soils

None of the alternatives, including the mitigated preferred alternative, would increase the threat to public health and safety due to seismic hazards. The Main Post straddles a long narrow canyon that contains low-density artificial fill that was placed over soft Bay Mud, Colma Formation (a firm sandy clay soil), and colluvium (a thick soil composed of particles eroded from nearby slopes). This area has many of the same geologic characteristics as the nearby Marina district that experienced extensive damage during the Loma Prieta earthquake.[70] This geologic subgrade is designated on the California Seismic Hazards Zone Map[71] prepared under the Seismic Hazards Mapping Act of 1990 as a zone requiring investigation for seismically induced liquefaction[72] hazards. Future earthquake ground motion is expected to be quite high due to the soft sandy hydraulic fill and the proximity of the San Andreas fault (about seven miles southwest of the site), the Hayward fault (about 12 miles northeast), and other major, active regional faults. During the permit review process, the Trust requires project proponents to prepare geotechnical reports that assess the nature and severity of the seismic hazards at the site and recommend project design and construction features to reduce the hazards. To ensure compliance with building code[73] provisions to the maximum extent feasible, when the Trust reviews the proposed work, it will determine the adequacy of the engineering and design features for the projects to provide a level of performance that would reduce the risk of life loss or injury during a major seismic event. Therefore, potential damage to the structure from geologic hazards on the individual project sites would be ameliorated through the Trust review of building permit applications. The Trust would approve the work only when the nature and severity of the seismic hazards at the site have been evaluated and appropriate mitigation measures have been proposed.

Construction activities have the potential to disturb and expose soil to forces of erosion. However, completed projects would not significantly alter the overall topography of the sites. As discussed in Section 3.11,

[70] *Both are mapped Quaternary artificial fill (Qaf) by the U.S. Geological Survey (Schlocker 1974).*

[71] *The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. The Seismic Hazards Zone Map for San Francisco (California Resources Agency 2000) can be viewed at* http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_sf.pdf. *The Trust uses the map in its land use planning and building permit processes, and requires that site-specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy within areas prone to liquefaction and earthquake-induced landslides.*

[72] *Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking.*

[73] *The Trust uses nationally accepted model building codes, including the 2003 International Building Code, the 2003 International Existing Building Code, and the 2001 State Historical Building Code (SHBC) (Part 8, Title 24, California Code of Regulations).*

Water Resources, the Trust would minimize soil erosion by requiring construction site operators to employ Best Management Practices to contain disturbances within localized areas. Routine monitoring and reporting of BMP performance would be conducted pursuant to Stormwater Pollution Prevention Plans.

Excavations for underground parking proposed under the mitigated preferred alternative would result in the creation of about 58,000 cubic yards of excess soil. If this soil cannot be reused within the park for landscaping or habitat restoration purposes or for compacted fill for Doyle Drive reconstruction and other projects, the soil would be transported and disposed off-site at a licensed landfill in accordance with applicable regulations.

Biological Resources

None of the alternatives, including the mitigated preferred alternative, would have a substantial impact on any riparian habitat or other sensitive natural community, threatened and endangered species, or federally protected wetlands. The project sites are in developed areas with low wildlife values, which do not support or provide habitat for any threatened or endangered wildlife species. The alternatives would not interfere with any native resident or migratory species. No construction activities (such as placement of fill material, mechanized land clearing, land leveling, or road construction) would occur beyond existing developed areas and no existing natural habitat would be displaced. The impacts of light pollution, including harm to nocturnal wildlife and ecosystems, would be minimized through high-quality outdoor lighting and minimal impact lighting techniques. The use of non-native invasive plant species would be restricted and park guidelines for protection of nesting birds[74] would be followed.

Population, Employment and Housing

The alternatives, including the mitigated preferred alternative, would not be expected to induce substantial population growth in the region either directly or indirectly, or add a significant number of employees to the region's economy. None of the alternatives would displace substantial numbers of existing housing units or substantial numbers of people, necessitating the construction of replacement housing in the Presidio or elsewhere.

Schools

The incremental residential growth that would result from the mitigated preferred alternative or other alternatives would not substantially increase the demand for schools or create the need for new schools. The Presidio is within an urban area that is served by the San Francisco Unified School District (SFUSD), which has approximately 55,272 of San Francisco's pre-school, elementary, middle and high school students at 37 preschools, 101 K-12 schools, 8 county/court schools, and 9 charter schools. The SFUSD has witnessed a 10.7-percent decline in enrollment during the past decade (Fall 1998–Fall 2008).

[74] *Bird nests that would be protected are those stipulated in the Migratory Bird Treaty Act (16 USC. 703* et seq.*). However, the United States Fish and Wildlife Service (USFWS) has determined that the protections of the Migratory Bird Treaty Act do not apply to non-native, human-introduced bird species such as the rock pigeon (the familiar "pigeon" of cities and parks) (70 Fed. Reg. 12710-12716 [Mar. 15, 2005]).*

Flooding

The alternatives, including the mitigated preferred alternative, would not have an adverse impact on flooding, because the amount of impervious surface at the Main Post would decrease. No portion of the Main Post is within a 100-year floodplain, and the Main Post is not subject to inundation in the event of reservoir failure or a tsunami.

Water Supply and Wastewater

The alternatives, including the mitigated preferred alternative, would not substantially increase the amount of water used or wastewater generated within the Presidio. The alternatives would use between 145,000 (Alternative 4) and 172,000 gallons (Alternative 2) of water per day.[75] The projected water consumption is an increment of the total increase assumed for planning purposes by the Trust and the San Francisco Public Utilities Commission, and an adequate water supply would be available for the mitigated preferred alternative. Water and sewer lines are adequately sized to handle existing and proposed flows, and no new water delivery or wastewater collection and treatment facilities would be required to service the alternatives, with the exception of new service connections or minor upgrades to connect new construction to the existing system. The buildings and new construction would be designed to incorporate water-conserving measures, such as low-flow fixtures and waterless urinals. Under terms and conditions of their leases, tenants are required to use water efficiently and responsibly, and are kept informed by the Trust of water conservation practices. Practicing water conservation to minimize water usage would also reduce wastewater generation and flows to the city's wastewater system. The alternatives would generate between 130,000 (Alternative 4) and 154,000 gallons (Alternative 2) of wastewater per day[76] for treatment at the city's Southeast Treatment Plant. The plant treats an average dry weather flow of about 67 million gallons per day (mgd) and up to 250 mgd during wet weather.

Energy and Solid Waste

The alternatives, including the mitigated preferred alternative, would not substantially increase the amount of energy used or waste generated within the Presidio. The alternatives would consume between 10.7 (Alternative 4) and 11.0 million kilowatt-hours (kWh) of electricity annually.[77] This increase in demand for electricity would be negligible in the context of overall demand within the Presidio and San Francisco, and would not require a major expansion of power facilities. High-efficiency heating and cooling equipment, lights, and appliances would be installed during construction and rehabilitation of the buildings. The buildings would meet or surpass the energy conservation requirements of the current California Title 24 Energy Code, where these requirements do not conflict with historic preservation objectives. Furthermore, the Trust would require applicants to seek a LEED® (Leadership in Energy and Environmental Design) Silver rating or better for their projects to demonstrate their

[75] *Based on water demand factors provided in Table 1, Domestic Water Demand Calculations, in Appendix H of the final PTMP EIS (Volume III).*

[76] *Based on flows provided in Table 52, Projected Wastewater Generation, on page 333 of the final PTMP EIS (Volume I).*

[77] *Based on energy and demand factors provided in Table 2, Electrical Use Projections – Final Plan Alternative, in Appendix J of the final PTMP EIS (Volume III).*

commitment to employing state-of-the-art strategies for sustainable site development, energy efficiency, materials selection, and indoor environmental quality.

Construction projects at the Main Post, such as building demolition, rehabilitation, and infill construction, would generate between 5,793 tons (Alternative 4) and 10,678 tons (Alternative 2) of mixed construction and demolition[78] (C&D) debris. The Trust would maximize the recycling of materials by requiring that mixed C&D debris be transported off-site by registered transporters and taken to registered facilities that can process and divert from landfill a minimum goal of 65 percent of the material generated from construction, demolition, or rehabilitation, including materials source-separated for reuse or recycling. During operation, tenants would comply with Trust waste management policies, which require them to develop a recycling program in conjunction with their activities at the Presidio, and to coordinate their recycling program with the Trust.

Hazardous Materials

The assessment and clean-up activities related to hazardous substances, pollutants, and contaminants on the Presidio are being conducted by the Trust with oversight by the California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board. This program involves extensive investigation, analysis, reporting, and if necessary remedial design and remedial action strategies. The characterization of contaminated sites, exposure pathways, and potential health risks associated with reuse and redevelopment at the Presidio are addressed under these regulatory controls separate from the NEPA process. Many of the historic buildings within the Presidio may contain asbestos, lead-based paint (LBP), or other hazardous materials, and soil within the drip-line of the buildings may contain LBP. Such hazardous materials are remediated in accordance with remediation/stabilization and removal plans approved by the Trust and all applicable federal and state laws and regulations requiring protection of human health and the environment. Remediation is performed such that exposure does not occur during the course of the clean-up activities. Institutional controls would be in place to protect future workers (e.g., notification to maintenance and construction workers), including adherence to the provisions of land use controls (LUCs) to address residual contamination in soil and groundwater. If remediation is required, it will be performed prior to or concurrently with construction of improvements. The risk of human exposure following remediation is low and precautionary measures would be implemented. Because remedial actions would be protective of human health and the environment and would expedite and enhance the beneficial reuse of identified contaminated areas, potential impacts on human health, safety, and the environment following clean-up would not be significant.

Proposed underground parking in the mitigated preferred alternative includes on-site excavation and removal of roughly 58,000 cubic yards of soil. If residual soil contamination were to exist in areas to be excavated,

[78] *Includes the materials that are discarded from construction and demolition activities including asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing. Based on solid waste generation factors provided in Table 3, Solid Waste Estimates by PTMP Alternative, in Appendix I of the final PTMP EIS (Volume III).*

contaminated soil could be encountered during excavation and other earth-moving activities. A soil management plan would be prepared and implemented to ensure the appropriate characterization and disposal of excavated soil. The plan would contain policies and procedures to protect site workers from potential health and safety impacts related to contaminated soil and groundwater. The plan would also include measures to minimize public exposure to contaminated soils, including dust control, appropriate site security, restriction on public access, and posting of warning signs.

Fire Hazards and Crime Prevention

None of the alternatives, including the mitigated preferred alternative, would substantially increase the demands for fire department or police services. The Presidio at present receives law enforcement services from the U.S. Park Police San Francisco Field Office (USPP), and fire protection and emergency services from the San Francisco Fire Department (SFFD). Although the mitigated preferred alternative or other alternatives could potentially increase the number of calls received from the area or the level of regulatory oversight that must be provided as a result of the increased concentration of activity on-site, the increase in responsibilities would not likely be substantial in light of the existing demand for police and fire protection services in the Presidio. Furthermore, the increase in demand would not require the construction of any new police or fire prevention facilities. During the permit review process, construction documents and shop drawings would be submitted to the USPP for security code compliance and installation of adequate security systems. At the same time, all alternatives would be required to comply with the requirements of the National Fire Protection Association (NFPA) Fire Codes and Life Safety Codes, including those associated with hydrant water pressure and emergency access.

Under the terms of an agreement between the Trust, NPS, and the City and County of San Francisco, as of October 1, 2010, the San Francisco Fire Department (SFFD) is the authority having jurisdiction for fire protection and emergency services in the Presidio. With federal funding to cover costs, the SFFD operates Station 51 in Building 218 on the Main Post. The SFFD provides the same level of services that is provided in other parts of the city, and staffs its crews to comply with all requirements of federal law and regulation pertaining to the provision of firefighting and emergency services and to local agency standards, policies, and medical protocols. Given the physical location of Station 51 on the Main Post, proposals within the Main Post Update would have no impact on response times or proposed staffing.

Environmental Justice

The alternatives, including the mitigated preferred alternative, would not have a disproportionately high or significant impact on low-income and minority populations. Rather, many of the proposed building uses would expand cultural and educational opportunities for these communities, as well as for the general population. None of the alternatives would substantially increase the burden on the Bayview and Hunters Point neighborhoods community due to wastewater discharges to the city's wastewater systems (a matter raised during scoping). Unlike the city, the Main Post does not have a combined sewer system that collects both wastewater and stormwater in the same network of pipes. As stormwater is treated and discharged directly into the bay, the amount of flows transported to the city's treatment plants is substantially lessened.

Furthermore, since 1990, total annual wastewater flows within the Presidio have been reduced to approximately 145 million gallons, or less than a third of 1990 flows. Current and projected future flows would represent less than one half of one percent of the dry and wet weather capacities of the Southeast Treatment Plant in the city's Bayview/Hunters Point area. Upon completion, the Trust's proposed on-site water recycling project would capture and reuse the majority of the Presidio's wastewater flows that are treated at the Southeast Treatment Plant. Implementation of stringent water conservation practices, including requirements for water-efficient fixtures (toilets, faucets, etc.) in all building rehabilitation projects, would also minimize wastewater generation at the park. Although future contribution would be very small, the Trust is committed to further reducing these flows to the greatest extent practicable and assisting in alleviating any burden placed on the Bayview and Hunters Point neighborhoods.

REFERENCES

California Resources Agency, Department of Conservation, Division of Mines and Geology. 2000. *State of California Seismic Hazards Zones. City and County of San Francisco Official Map*. Released November 17.

Council on Environmental Quality (CEQ). 2010. *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions.* Dated February 18, 2010.

San Francisco Unified School District. 2008. *SFUSD District and School Profiles 2008-2009 (Fall 2008).*

Schlocker, Julius. 1974. *Geology of the San Francisco North Quadrangle, California.* U.S. Geological Survey Professional Paper 782. 109 pages.

Public Involvement and Agency Consultation

This section describes the processes used by the Trust to invite the participation of the public prior to preparation of the final SEIS (see Section 4.1 below), and to concurrently consult with interested parties under Section 106 of the National Historic Preservation Act (NHPA) (see Section 4.2 below). The Section 106 consultation culminated in a programmatic agreement (Appendix B), which takes into account the effects of the project on historic properties. The NEPA process will conclude in a record of decision (ROD) that will fully account for the provisions of the Section 106 consultation.

4.1 Public Participation

The Trust provided numerous opportunities for individuals and organizations to submit comments on the Main Post Update and the draft SEIS and to influence the outcome of Trust decisions. Inviting public comment began with the lodge and the art museum proposals, which were each scoped twice, first as separate actions and again as part of the Main Post Update SEIS. Therefore, the discussion in this section includes separate summaries of the public participation process during each phase of environmental review leading to the final SEIS.

PRESIDIO LODGE EA SCOPING

The public was notified of the lodge proposal on November 6, 2006 through a "scoping notice" sent to approximately 225 individuals, organizations, and agencies on the Trust's Main Post mailing list. The notice announced the proposal and invited the public to attend an informational meeting and to submit comments on the issues, impacts, and alternatives to be addressed in an environmental assessment (EA). On December 16, 2006 the Trust initiated consultation on the lodge proposal under Section 106 of the NHPA. The public meeting was also announced in the Winter 2007 issue of "At the Presidio," the Trust's quarterly publication. The public meeting was held at the Officers' Club on December 11, 2006; it was attended by 50 people and 14 spoke. At the request of meeting attendees, the Trust announced and held a second meeting at the Officers' Club on January 29, 2007 to allow the public to participate in developing the Trust's request for proposals (RFP) process, and to preview draft design guidelines for the project. Forty-three people attended the meeting, which was conducted in a workshop format following a brief presentation. Input from that meeting was incorporated into the final RFP, which the Trust issued in January 2007.

By the close of the 90-day public scoping period for the proposed project (November 10, 2006 – February 8, 2007), or shortly after, the Trust received six letters: those from the National Trust for Historic Preservation (National Trust), the Presidio Historical Association (PHA),

the Pacific Heights Residents Association (PHRA), the Tides Network (Tides, a Presidio tenant), and two letters from interested individuals (Carey Feierabend and Leonard Richardson). See Section 4.1 (Presidio Lodge EA Scoping Process and Issues Raised during Scoping) of the draft SEIS for a summary of the oral and written comments received[79] with responses to the issues raised.

ART MUSEUM EIS SCOPING

The Trust commenced preparation of the EIS by publishing a Notice of Intent (NOI) in the Federal Register on August 14, 2007 (72 FR 43469). The NOI was also widely distributed to interested parties and posted on the Trust's web site. Consultation under Section 106 of the NHPA was initiated on August 8, 2007. The NOI provided descriptions of the proposed action and possible alternatives, the scoping process including time and place of an upcoming public meeting, and contact information. The public meeting was held at the Officers' Club on September 24, 2007, at which 66 members of the public attended and 24 spoke. By the close of or shortly after the 60-day public scoping period for the project (August 14, 2007 – October 15, 2007), the Trust received 87 comment letters and electronic mails, including one petition with more than 125 signatures (Table 28 in draft SEIS). Many of the commentors focused on the appropriateness of a contemporary art museum at the Main Post and requested that the Trust evaluate the proposed museum in the context of other foreseeable actions at the district and to investigate one or more alternative sites. Commentors also raised concerns about the potential traffic and parking impacts that would be caused by the proposed museum, and the potential loss of existing recreational facilities (the bowling center and the tennis court) at the proposed cultural institution site. In addition, commentors were concerned about impacts of new construction on the National Historic Landmark District, on visual resources, and on the relationship of the proposed museum to the Trust's self-sufficiency goals. See Section 4.2 (Art Museum EIS Scoping Process and Issues Raised during Scoping) of the draft SEIS for a summary of the scoping comments received with responses to the key issues raised.

MAIN POST UPDATE SEIS SCOPING

The Trust notified interested parties in the Federal Register notice of October 29, 2007 (72 FR 61191-61192) and through a direct mailing that in response to public concerns it had terminated the separate NEPA and NHPA processes for the lodge and art museum. The notices announced that the Trust would instead prepare a single EIS to analyze these and other reasonably foreseeable actions at the Main Post in a supplement to the PTMP EIS, and would seek public input through scoping. Notice was sent on November 9, 2007 initiating consultation on the Main Post EIS under Section 106 of the NHPA. The Trust held a public meeting on November 28, 2007 at the Officers' Club to accept comments on the scope of the supplemental EIS. Approximately 125 people attended the meeting and 29 spoke. By the close of the public scoping period for the project on December 15, 2007, the Trust received 271 comment letters and electronic mails (Table 29 in draft SEIS). See Section 4.3 (Main Post Update SEIS Scoping Process and Issues Raised during Scoping) of

[79] *Scoping letters and summaries of the comments received at the scoping meetings are available for public review at the Presidio Trust Library, 34 Graham Street, and constitute part of the formal public record.*

the draft SEIS for a summary of the scoping comments received with responses to the key issues raised.

INVITING COMMENTS ON THE MAIN POST UPDATE DRAFT SEIS

The Trust released the draft SEIS for public comment on June 8, 2008. Notice of the availability of the draft SEIS was provided by the U.S. Environmental Protection Agency (EPA) on June 13, 2008 (73 FR 33814). The EPA's notice of availability identified the 45-day time period for public review of the draft SEIS to end July 31, 2008. In response to requests from interested parties, the Trust extended the prescribed comment period by 50 days to September 19, 2008 (73 FR 45092), again by 31 days to October 20, 2008 (73 FR 53295), again by 27 days to November 17, 2008 (73 FR 60368), and again by 28 days to December 15, 2008 (73 FR 67898). By extending the comment period, the Trust anticipated more in-depth comments on the draft SEIS to promote a better-informed decision on the proposed action. More than 300 copies of the draft SEIS were distributed to commenting agencies and the public. The draft SEIS was also made available for review at the Trust Headquarters, at local libraries, and on the Trust's web site.

The public was invited to provide oral comment on the draft SEIS at Trust Board of Directors meetings on July 14, 2008, where approximately 700 people attended and at which 125 spoke, and on December 9, 2008, where approximately 200 people attended and at which 67 spoke.[80] In addition, the Trust conducted approximately 23 guided walks during the summer of 2008 (June 15 to August 27) to provide information, answer questions, and accept public "comment cards" on the draft SEIS and the various proposals being considered. These walks and tours were attended by over 1,500 people. The Trust also hosted five workshops: one on July 28, 2008 attended by approximately 100 people to discuss the transportation and parking analysis section of the draft SEIS; three during the fall of 2008 (September 25, September 28, and October 2[81]) attended by approximately 125 people to provide additional opportunities to discuss the draft SEIS and the alternative concepts for the Main Post; and one on November 19, 2008 attended by approximately 120 people to update the public about the compliance process, familiarize them with the applicable standards for building in a historic site, and introduce most recent strategies that had been developed. Additionally, the Trust participated in numerous meetings with neighborhood groups, resource conservation organizations, professional and civic associations, and various commissions of the City and County of San Francisco, including the Planning Commission and Landmarks Preservation Advisory Board. By the time the supplement to the draft SEIS was circulated in February 2009, the Trust had received comments from 5 public agencies, 1 elected official, 51 organizations, and 2,343 individuals, including form letters.[82] In general, many of the commentors expressed a strong desire to enhance and maintain the historic character of the Main Post, and ensure that the

[80] *Transcripts of the July 14, 2008 and December 9, 2008 public meetings can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

[81] *Transcripts and a summary (MIG 2008) of the September 25, September 28, and October 2, 2008 Main Post workshop series can be viewed at the Presidio Trust Library and on the Trust's web site.*

[82] *Comment letters are available for review at the Presidio Trust Library and constitute part of the formal public record.*

Main Post is preserved as a place of natural beauty and as an oasis in the city for future users. The same commentors noted how unique the Main Post is and the importance of maintaining its strong sense of place. Many commented that the Main Post should have a high level of public accessibility, particularly in the Montgomery Street Barracks, and that the plan to reveal El Presidio would be an important asset. While most commentors were against the now-withdrawn museum of contemporary art (CAMP) proposal for the Main Post, many were open to the museum being located elsewhere on the Presidio. In addition, though commentors were concerned about new construction, they were also open to the addition of new buildings as long as they were consistent with the character of the Main Post. The provision of lodging on the Main Post was seen as appropriate, particularly in regards to reuse of Pershing Hall. However, there was some skepticism regarding the need for new construction of a freestanding lodge along the eastern edge of the Main Parade. Finally, most supported expanding the Presidio Theatre, converting a portion of Building 50 into a Heritage Center, and developing a state-of-the-art Archaeology Center in the buildings and garages adjacent to Building 50. See Section 2 of the Response to Comments volume of the final SEIS for responses to all substantive public comments received on the draft SEIS.

INVITING COMMENTS ON THE SUPPLEMENT TO THE MAIN POST UPDATE DRAFT SEIS

The Trust announced in a December 8, 2008 press release (Trust 2008), also made available on its web site, and in a December 12, 2008 Federal Register notice (73 FR 75777) that, as the result of the Trust's analysis of the alternatives in the draft SEIS and the analysis developed in the course of consultation under Section 106 of the NHPA, and in consideration of public comment, it had identified a preferred alternative and would analyze the alternative in a supplement to the draft SEIS. In the announcements, the Trust indicated that it elected to address the preferred alternative in a supplement to the draft SEIS to best integrate and satisfy its NEPA and NHPA requirements. The announcements also informed the public that the Trust would continue to accept public comments on the draft SEIS until the deadline for comments on the supplement. The Trust Board of Directors held a public meeting on December 9, 2008 to explain the preferred alternative and accept public comment. Approximately 250 people attended the meeting and 68 offered comments.

The Trust made the supplement to the draft SEIS available to the public at the beginning of the last week of February 2009. The EPA published notice that the supplement was filed by the Trust and received on March 6, 2009 (74 FR 9817-9818). The EPA's notice of availability identified the 45-day time period for public comment to end April 20, 2009, which the Trust extended by 7 days to April 27, 2009 at the request of the public (74 FR 15265), and again by 35 days to June 1, 2009 (74 FR 18706). More than 300 copies of the supplement were transmitted to commenting agencies and individuals. The supplement was also made available for review at the Trust Headquarters, at local libraries, and on the Trust's web site.

The Trust initially decided to hold three public meetings during the comment period for the supplement to provide opportunities for the public to provide oral comment. However, in response to public requests, the format of the third public meeting was changed to a planning workshop that provided an overview of the transportation issues

being analyzed through the Main Post planning and environmental review process. Trust and City and County of San Francisco staff were also on hand to answer questions about transportation issues. The first public meeting on April 1, 2009 was attended by approximately 40 people and 19 spoke. The second meeting, held by the Trust Public Board of Directors on April 7, 2009, was attended by approximately 375 people and 84 spoke. The transportation workshop on April 22, 2009 was attended by approximately 125 people and 23 spoke.[83]

From March 6, 2009 through April 18, 2009, the Trust maintained a drop-in (10:00 AM to noon Fridays and Saturdays) Main Post Information Center in Building 105 for the public to learn more about the preferred alternative and the planning and environmental review process. Illustrations and other information about proposals in the alternative were displayed, and Trust staff were present to answer questions and make comment cards available.

The Trust also held two informal "open houses" on May 18, 2009 and May 20, 2009, at which Trust staff were available to respond to questions about the proposed projects for the Main Post as well as questions about historic resources, transportation and parking, visitor use, and environmental sustainability. Approximately 30 people attended the two sessions.

By the close of or shortly after the 87-day comment period for the supplement (March 6, 2009 – June 1, 2009), the Trust received comments from 7 public agencies, 1 elected official, 51 organizations, and 2,845 individuals, including form letters and those comments received on the draft SEIS.[84] In general, commentors recognized and appreciated the changes the Trust made in plans for the Main Post between the draft SEIS and the supplement but still had key concerns about several of the proposed projects. Some appreciated the improvements to the now-withdrawn CAMP's design, size, and appearance to limit its visual prominence, while others felt the design was as "troubling" as the original proposal. Those commentors that previously were in favor of the lodge and theater welcomed the added improvements to the designs, noting that the changes were a step in the right direction. Others did not support demolition of Buildings 40 and 41 to better interpret the archaeological site of El Presidio. Many also remained concerned about impacts related to traffic and parking, especially on surrounding neighborhoods. See Section 2 of the Response to Comments volume of the final SEIS for responses to all substantive public comments received on the supplement.

[83] *Transcripts of the April 1, 2009 and April 7, 2009 public meetings and the April 22, 2009 workshop can be viewed at the Presidio Trust Library and on the Trust's web site, and constitute part of the formal public record.*

[84] *Comment letters are available for review at the Presidio Trust Library, and constitute part of the formal public record.*

4.2 Consultation under the National Historic Preservation Act

The Section 106 regulatory process takes into account the effects of a federal agency's actions on historic properties. As stipulated in the Trust's 2002 PA for the PTMP, the Trust opened a consultation in accordance with 36 CFR 800.5 when the agency determined that the undertaking had the potential for adverse effect. Section 106 provides an opportunity for members of the public with a demonstrated interest in the project to participate as consulting parties, providing written and oral comments on the undertaking. There are currently 17 consulting parties, including government agencies, neighborhood groups, historic preservation organizations, and project applicants.[85]

Through the Section 106 process, the Trust, in collaboration with consultation parties, established an Area of Potential Effects (APE), which identifies the historic resources that may be affected by the undertaking. For this undertaking, the APE was determined to be the entire Presidio NHLD. The Trust then assessed the effects on historic resources brought about by the undertaking through a draft Finding of Effect (FOE), which was circulated for comment on August 8, 2008. The draft FOE for the revised undertaking was circulated for comment in February 2009. The California State Historic Preservation Officer and Advisory Council on Historic Preservation concurred with the draft FOE's finding of adverse effect, enabling the Trust to issue a final FOE on July 6, 2009 and proceed to the resolution phase of the consultation.

[85] *A list of participants in the consultation process for this undertaking is provided in the final Finding of Effect.*

The Section 106 consultation was resolved through the execution of the Programmatic Agreement for the Main Post (PA-MPU) (Appendix B), which describes how the Presidio Trust will "avoid, minimize, or mitigate" the effects identified in the FOE.[86] Execution of the PA-MPU involved the signatory parties to the 2002 PA: the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the National Park Service, and the Presidio Trust. Other interested parties involved in the Section 106 consultation process may also concur with the PA-MPU if they choose.

Since initiation of the consultation on November 9, 2007, there have been eight consulting party meetings (December 11, 2007, February 26, 2008; September 16, 2008; December 5, 2008; April 21, 2009; August 18-20, 2009; January 26, 2010; and September 14-15, 2010). Representatives from all consulting parties were invited to attend these meetings. Due to the large number of consulting parties, the Trust also conducted numerous smaller focus meetings with groups of consulting parties over the course of the consultation. The Trust used the meetings to present materials to help parties identify and assess adverse effects, comment on the draft FOE, and develop the draft PA-MPU.

As part of the Section 106 process, the Trust held a two-day design workshop in August 2008 with representatives of the National Park Service. The purpose of the workshop was to apply the Secretary of Interior's Standards to the project proposals described in the draft SEIS and develop alternative concepts for the various elements of the undertaking, including the art museum, the lodge, and the theater.

[86] *See 36 CFR 800.6 (Resolution of Adverse Effects).*

Architects and other historic resource experts from both organizations identified the applicable Secretary of the Interior's Standards for rehabilitation and new construction in a NHLD. The workshop considered the nature of the effects on the resources, including historic buildings, archaeological resources, the cultural landscape, historic views, and the relation of built and open space. Strategies included ways to reduce building size, scale, and mass; ways to orient the buildings to the site; and ways to articulate the buildings with architectural features. The information from the two-day workshop was condensed into a multi-page evaluation matrix based on the applicable Secretary of Interior's Standards, which was made available for public review on the Trust's web site. The Trust presented the information to representatives from the ACHP and SHPO; comments from both agencies were incorporated into the matrix. The evaluation matrix assisted the Trust in its development of the preferred alternative described in the supplement. The Trust has continued to work with project applicants, fellow government agencies, and consultation parties to avoid, minimize, or mitigate the adverse effects identified in the final FOE. Consultation meetings and focused design discussions in 2009 resulted in changes to the undertaking that have dramatically lessened the impacts on historic resources. On November 17, 2009, the Trust released a draft PA-MPU to resolve the Section 106 consultation. Formal consultation meetings and informal "question-and-answer" sessions held in December 2009 and January 2010 further informed the development of the PA-MPU. The PA-MPU was circulated on March 26, 2010, and the final PA-MPU is provided in Appendix B.

REFERENCES

Advisory Council on Historic Preservation (ACHP). 2002. *ACHP Section 106 Regulations, Section-by-Section Questions and Answers.* Updated April 26. *http://www.achp.gov/106q&a.html.*

Council on Environmental Quality (CEQ). 1981 and 1986. *CEQ 40 Questions—Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations.* 46 FR 18026 (March 23, 1981) as amended by 51 FR 15618 (April 25, 1986).

CEQ. 2008. *Draft CEQ Handbook on Coordinating the National Environmental Policy Act with Other Federal Environmental Laws.*

MIG. 2008. *Main Post Workshop Series Summary*. Dated December.

Presidio Trust. 2008. *Presidio Trust Takes Next Steps in Planning for the Main Post and Identifies a Preferred Alternative.* Press Release. Dated December 5.

Report Preparers / Persons Contacted / SEIS Distribution

5.1 List of Preparers

The following persons were primarily responsible for preparing this SEIS.

DOCUMENT AT LARGE

John Pelka, Compliance Manager, Presidio Trust
M.C.P., Environmental Planning, University of California, Berkeley
B.A., Urban Planning, Rutgers University

Kerry Boutte, Environmental Protection Specialist, Presidio Trust
M.A., Anthropology, University of Texas at Arlington
B.A., Anthropology, University of New Orleans

Jennifer Correia, Historic Compliance Coordinator, Presidio Trust
M.S., Historic Preservation, University of Pennsylvania
B.S.M., Management, Tulane University

TRANSPORTATION AND PARKING

Amy R. Marshall, Transportation Engineer, Presidio Trust
M.S., Transportation Engineering, University of California, Berkeley
B.S., Civil Engineering, University of Kentucky

AIR QUALITY / NOISE / GLOBAL RESOURCES

Brewster Birdsall, PE, QEP, Senior Associate, Aspen Environmental Group
M.S., Civil Engineering, Colorado State University
B.S., Mechanics and Mechanical Engineering, Lehigh University

HISTORIC RESOURCES

Ric Borjes, former Federal Preservation Officer, Presidio Trust
B.A., Architecture, University of Colorado

Rob Thomson, Deputy Federal Preservation Officer, Presidio Trust
M.S., Historic Preservation, Columbia University
B.A., Archaeology, University of Virginia

ARCHAEOLOGY

Eric Blind, Principal Archaeologist, Presidio Trust
M.A., Anthropology, University of California, Berkeley
B.A., Sociology/Anthropology, Saint Mary's College of Maryland

VISUAL RESOURCES

Chandler McCoy, AIA, LEED AP, Associate Director for Planning & Design, Presidio Trust
M.A., Planning and Preservation, Columbia University
B.S., Architecture, University of Virginia
Certificate Holder, ICCROM Architectural Conservation

Thomas Packard, ASLA, Principal, Tom Packard & Associates
B.L.A., University of Illinois

WATER RESOURCES / UTILITIES

Mark Hurley, Associate Director, Infrastructure Management Services, Presidio Trust
M.S., Environmental Engineering, Loyola Marymount University
B.S., Civil Engineering, Loyola Marymount University

David J. Fyfe, PE, URS Corporation
B.S., Civil Engineering, San Jose State University

Thomas M. Sweet, PE, LEED AP, URS Corporation
B.S., Civil Engineering, University of Minnesota

GEOLOGY AND SOILS / HAZARDOUS MATERIALS

George Ford, former Manager of Remedial Construction, Presidio Trust
M.S., Engineering Geology, Stanford University
B.S, Geology, Stanford University

WRITING AND EDITING / TECHNICAL REVIEW

Natalie Macris, Urban and Environmental Planner/Editor
M.C.P., City Planning, University of California, Berkeley
A.B., History, University of California, Berkeley

Tim A. Erney, AICP/PTP, Transportation Engineering Department Manager, DMJM Harris | AECOM
M.S., Transportation Engineering, University of California, Berkeley
M.C.P., City and Regional Planning, University of California, Berkeley
B.S., Mechanical Engineering, Boston University

José I. Farrán, PE, Principal, ADAVANT Consulting
M.E., Transportation Engineering, University of California, Berkeley
B.S., Civil Engineering, Polytechnical University of Barcelona, Spain

Dana McGowan, Principal, ICF Jones and Stokes
M.A., Anthropology (Emphasis Archaeology), California State University, Sacramento
B.A., Anthropology, California State University, Sacramento

Cornelia “Lee” Wyma, Historic Preservation Specialist, URS Corporation
J.D., University of Denver
M.A., University of Essex, England
B.Arch., University of Kentucky

GRAPHICS DESIGN AND PHOTOSIMULATIONS

Becky Carpenter, Senior Graphic Designer, Presidio Trust
B.S., M.Ed., Health Education, Texas A&M University

Hartmut H. Gerdes, Principal, Square One Productions
M. Arch., M.C.P., University of Pennsylvania
Dipl.-Ing., University of Karlsruhe, Germany

Angela Lin, Senior Associate, Square One Productions
B.A., Fine Arts, Wesleyan University

LAYOUT AND WORD PROCESSING

Brian Vahey
B.F.A., Film and Television Production, New York University

5.2 List of Persons Consulted

The following persons and agencies were consulted during preparation of the SEIS.

Melanie Blum, President, San Francisco Film Society Board of Directors

Lucia Bogatay, AIA, Member, Presidio Historical Association

Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area

Jeffrey Chan, Senior Transportation Planner, DMJM Harris | AECOM

Neal Desai, Senior Program Manager, Pacific Region, National Parks Conservation Association

Milford W. Donaldson, State Historic Preservation Officer, Office of Historic Preservation, Department of Parks and Recreation, State of California

Becky Evans, Member, Sierra Club

Jean-Marie Feyling, Amah/Mutsun Tribal Band

John Fowler, Executive Director, Advisory Council on Historic Preservation

Andrew Galvan, Ohlone Indian Tribe

Ramona Garibay, Representative, Trina Marine Ruano Family

Amanda Gassaway, Sales Coordinator, Fort Mason Foundation

Richard Gluckman, FAIA, Architect, Gluckman Mayner Architects

Jack A. Gold, former Executive Director, San Francisco Architectural Heritage

Anthea M. Hartig, Ph.D., Director, Western Office, National Trust for Historic Preservation

Whitney Hall, Presidio Historical Association

Judith Hulka, former President, Neighborhood Association for Presidio Planning

Elaine Jackson-Retondo, National Register and National Historic Landmarks Program, Pacific West Region, National Park Service

Craig Kenkel, former Chief of Cultural Resources and Museum Management, Golden Gate National Recreation Area, National Park Service

Katharine Kerr, Office of Federal Agency Programs, Advisory Council on Historic Preservation

Boyd de Larios, Descendants of the Anza and Portola Expeditions

Mark Luellen, Preservation Coordinator, San Francisco Planning Department

Kyri S. McClellan, Project Manager, Base Reuse & Development, Mayor's Office of Economic and Workforce Development

Amy Meyer, Chair, People for a GGNRA

Victor Meyerhoff, Proprietor, Presidio Bowling Center

Ron Miguel, former President, Planning Association for the Richmond

Richard Moe, former President, National Trust for Historic Preservation

Joy L. Navarrete, Environmental Planner, San Francisco Planning Department

Shelley Niedernhofer, PE, Chief of Administration and Business Services, San Francisco Maritime National Historic Park

Terence J. Reagan, TJ Reagan, Inc.

Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan

Paul Scolari, Native American Liaison, Golden Gate National Recreation Area, National Park Service

Robert Sindelar, Executive Director, Presidio Community YMCA

Lana Stukov, Administrator, Your Health

Anthony Veerkamp, Senior Program Officer, Western Office, National Trust for Historic Preservation

Sammi Wang, Senior Clerk Typist, Presidio Child Development Center

Gary Widman, President, Presidio Historical Association

Jason Wright, Member, Presidio Historical Association

Irene Zwierlein, Chairperson, Amah/Mutsun Tribal Band

5.3 List of Agencies and Organizations[87]

The following agencies and organizations were sent copies of the final SEIS for their review.

PUBLIC AGENCIES

Advisory Council on Historic Preservation

United States Department of the Interior, National Park Service, Golden Gate National Recreation Area

United States Department of the Interior, National Park Service, Pacific West Region

United States Department of the Interior, Office of the Secretary, Office of Environmental Policy and Compliance, Regional Environmental Office

United States Environmental Protection Agency, Office of Federal Activities

United States Environmental Protection Agency, Region IX

City and County of San Francisco Landmarks Preservation Advisory Board

ELECTED OFFICIALS

Hon. Gavin Newsom, Mayor, City and County of San Francisco

Michela Alioto-Pier, Member, Board of Supervisors, District 2, City and County of San Francisco

NEIGHBORHOOD ORGANIZATIONS

Cow Hollow Association

Lake Street Residents Association

Laurel Heights Improvement Association

Marina Community Association

Neighborhood Associations for Presidio Planning

Pacific Heights Residents Association

Planning Association for the Richmond

Presidio Neighborhood Representative Work Group

NATURAL RESOURCE CONSERVATION ORGANIZATIONS

National Parks Conservation Association

People for a Golden Gate National Recreation Area

Sierra Club Presidio Committee

[87] *Partial listing.*

HISTORIC PRESERVATION ORGANIZATIONS

California Heritage Council
National Trust for Historic Preservation, Western Office
Presidio Historical Association
San Francisco Architectural Heritage

HERITAGE ORGANIZATIONS

Descendants of the Anza and Portola Expeditions
Los Californianos
Society of Hispanic Historical and Ancestral Research
Vaquero Heritage Foundation

ACADEMIC ORGANIZATIONS

Department of Anthropology, Stanford University
San Francisco State University, History Department

OTHER ORGANIZATIONS

American Society on Aging
Presidio Community YMCA
Presidio Interfaith Chapel
San Francisco Film Society

LIBRARIES

San Francisco Main Public Library
San Francisco Public Library, Marina Branch
San Francisco Public Library, Presidio Branch
University of California, Berkeley, Institute of Governmental Studies

Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
AMA	Archaeological Management Assessment
AMP	Archaeological Monitoring Plan
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BETP	Built Environmental Treatment Plan
BMP	Best Management Practice
BOQ	Bachelor Officers' Quarters
BRT	Bus Rapid Transit
C&D	construction and demolition
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CAT	Climate Action Team
CCSF	City and County of San Francisco
CDC	Child Development Center
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHA	Cow Hollow Association
CLA	Cultural Landscape Assessment
CO	carbon monoxide
CO_2	carbon dioxide
CRS	Center for Resource Solutions
CTBS	Citywide Travel Behavior Survey
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibels
DTSC	California Department of Toxic Substances Control
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMS	environmental management system
EPA	U. S. Environmental Protection Agency
FHWA	Federal Highway Administration
FOE	Finding of Effect
FONSI	Finding of No Significant Impact
GGNRA	Golden Gate National Recreation Area
GHG	greenhouse gases
GIS	Geographic Information System
GMPA	General Management Plan Amendment
HABS	Historic American Building Survey
HCM	Highway Capacity Manual
HSR	historic structures report
ITE	Institute of Transportation Engineers
LBP	lead-based paint

LDAC	Letterman Digital Arts Center
Ldn	day-night equivalent sound level
LEED	Leadership in Energy and Environmental Design
Leq	equivalent sound level
LOS	level of service
LUC	land use control
MMTCO2e	million metric tons of carbon dioxide equivalent
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer System
N_20	nitrous oxide
NAC	Noise Abatement Criteria
NAGPRA	Native American Graves Protection and Repatriation Act
NAPA	National Academy for Public Administration
NAPP	Neighborhood Associations for Presidio Planning
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHL	National Historic Landmark
NHLD	National Historic Landmark District
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NOx	nitrogen oxide
NPCA	National Parks Conservation Association
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
OMB	Office of Management and Budget
P.L.	Public Law
PA	Programmatic Agreement
PAR	Planning Association for the Richmond
PGGNRA	People for a Golden Gate National Recreation Area
PHA	Presidio Historical Association
PHRA	Pacific Heights Residents Association
PHSH	Public Health Service Hospital
PM10	particulate matter less than 10 microns in diameter
PM2.5	particulate matter less than 2.5 microns in diameter
PTMP	Presidio Trust Management Plan
RCP	reinforced concrete pipe
RFP	request for proposals
ROD	Record of Decision
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SEIS	Supplemental Environmental Impact Statement
SFCTA	San Francisco County Transportation Authority
SFFD	San Francisco Fire Department
SFUSD	San Francisco Unified School District
SHBC	State Historical Building Code
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
TCM	transportation control measures
TDM	transportation demand management
TEP	Transit Effectiveness Project
USFWS	U. S. Fish and Wildlife Service
USPP	U.S. Park Police San Francisco Field Office
USTA	U. S. Tennis Association
WPA	Works Progress Administration
YMCA	Presidio Community YMCA

Glossary

In order to aid reader understanding, this section provides layperson's terms rather than technical definitions that may apply in a specialized field of knowledge. Some definitions are specific to the Presidio or to a certain environmental topic; for example, the definition of "attainment" ("achievement of air quality standards") applies specifically to air quality analysis.

Adverse effect Direct or indirect harm to historic properties listed on or eligible for inclusion in the National Register of Historic Places. The National Historic Preservation Act regulations set forth criteria used to assess adverse effects at 36 CFR 800.5.

Advisory Council on Historic Preservation (ACHP) An independent federal agency that promotes the preservation, enhancement, and productive use of the nation's historic resources and advises the President and Congress on national historic preservation policy.

Air pollutant Foreign or natural substances that are discharged, released, or over-generated into the atmosphere that could result in adverse impacts on humans, animals, vegetation, or materials. Also known as an air contaminant. Examples include but are not limited to smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids, or any combination thereof.

Air Quality Management District Local government agency charged with controlling air pollution and attaining air quality standards. The Presidio is included in the Bay Area Air Quality Management District.

Alternative mitigation *See* creative mitigation.

Ambient air quality standards Health- and welfare-based standards established by the state or federal government for clean outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period of time.

Ambient noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location.

Ambient noise level The normal or existing level of environmental noise at a given location and composed of sound from all sources near and far. In many cases, the term "ambient" is used to describe an existing or pre-project condition and is used as a reference when conducting environmental noise analyses.

Archaeological resource Any material remains or physical manifestation of past human life or activities that are of archaeological interest (i.e., capable of providing scientific or humanistic understanding of past

human behavior and its effects on the environment, cultural adaptation, and related topics through the application of scientific techniques).

Area A The predominately coastal area of the Presidio, comprising about 320 acres, under the jurisdiction and management of the National Park Service.

Area B The area of the Presidio, comprising about 1,160 acres, under the administrative jurisdiction of the Presidio Trust. Area B is defined in Title I of the Presidio Trust Act and includes the interior (non-coastal) portion of the Presidio and nearly all built areas of the park.

Area of Potential Effects (APE) The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. For the purposes of this undertaking, the APE is the entire NHLD.

Attainment Achievement of air quality standards.

Avoidance Accomplished by relocating construction or other potentially harmful activities to areas where there are no known archaeological or historic resources.

Bay Area Air Quality Management District (BAAQMD) The regional government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties.

Best Management Practices (BMPs) Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to receiving waters.

Carbon monoxide (CO) A colorless, odorless toxic gas produced by the incomplete combustion of carbon-containing substances. It is emitted in the exhaust of gasoline-powered vehicles.

Character-defining features Visual aspects and physical features that comprise the appearance of an historic building. Character-defining features include the overall shape of the building, its materials, craftsmanship, decorative details, and interior spaces and features, as well as the various aspects of the building's site and environment.

Clean Air Plan (CAP) The Bay Area Air Quality Management District's plan to reduce emissions of certain air pollutants (reactive organic gases [ROG] and nitrogen oxides [NOx]) that lead to the formation of ozone, or "smog," in the lower atmosphere.

Climate change A global problem that results from global greenhouse gas emissions. *See also* greenhouse gases.

CNEL (Community Noise Equivalent Level) The 24-hour average noise level, with noise occurring during evening hours (7:00 – 10:00 PM) weighted by a factor of three and noise occurring during nighttime hours weighted by a factor of ten prior to averaging.

Conformity A process mandated in the federal Clean Air Act to insure that federal actions do not impede attainment of the federal health standards. General conformity sets out a process that requires federal agencies to demonstrate that their actions are neutral or beneficial to air quality.

Creative mitigation Alternatives or additions to archaeological data recovery as mitigation for an undertaking's adverse effects. Such

approaches are usually considered as part of a broader mitigation package.

Criteria air pollutants Air pollutants for which the federal or state government has established ambient air quality standards or criteria for outdoor concentration in order to protect public health.

Criteria for Evaluation The National Register's criteria for evaluating the significance of properties that recognize the accomplishments of those who have made a significant contribution to the country's history and heritage. The criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the National Register.

Cultural landscape A geographic area, including cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. At the Presidio, the cultural landscape is inextricably linked to the Presidio's continuous military occupation since 1776. The 2002 Cultural Landscape Assessment (CLA) for the Main Post describes the changes in the area that occurred through the nine major periods of Presidio history.

Cultural resource An aspect of a cultural system that is representative of or is valued by the group of people with whom it is traditionally associated. A cultural resource can be a tangible entity, but may also include less material forms such as dance styles, folkways, or religious customs. Tangible entities at the Presidio include archaeological resources, cultural landscapes, and historic structures.

Cumulative effects Changes resulting from the impacts of an action combined with other past, present, and reasonably foreseeable future actions, regardless of the agency (federal or non-federal) or individual responsible for undertaking such actions.

Data recovery A common mitigation measure that usually includes scientifically controlled archaeological hand excavation, by which (through implementation of a treatment plan) the information within an archaeological site is retrieved before the site's integrity is compromised or destroyed. This option preserves some of the important scientific information.

dB or dBA A decibel (dB) is the standard unit of sound amplitude, or loudness; decibels are measured on a logarithmic (i.e., non-linear) scale. The A-weighted (dBA) scale is adjusted for human sensitivity.

Development agreement A contract between a private development partner and a government entity, such as the Trust, that may specify conditions, terms, restrictions, and regulations pertaining to all aspects of a development.

Direct effect An impact that occurs as a result of the proposed action or alternative in the same place and at the same time as the action.

Diversion For waste measurement purposes, any combination of waste prevention (source reduction), recycling, reuse, and composting activities that reduces waste disposed at permitted landfills and transformation facilities.

Doyle Drive A critical section of U.S. Highway 101 that connects San Francisco to the Golden Gate Bridge along the Presidio's northern waterfront. Originally constructed in 1936, the roadway is nearing the end of its useful life.

El Presidio de San Francisco (El Presidio) The military settlement and northernmost outpost of colonial New Spain established at the Golden Gate in 1776, and the cornerstone and namesake of the Presidio today.

Environmental Assessment (EA) A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

Environmental Impact Statement (EIS) A detailed National Environmental Policy Act (NEPA) document prepared when a proposed action or alternative has the potential for significant impact on the human environment.

Environmental justice When such analysis is required by the NEPA, identifying and addressing, as appropriate, high and adverse human health or environmental effects of federal actions, including effects on minority communities and low-income populations.

Environmental review *See* NEPA process.

Exceedance A monitored level of concentration of any air contaminant higher than federal or state ambient air quality standards.

External trip A trip that originates outside the Presidio and terminates in the Presidio, or originates in the Presidio and terminates outside the Presidio.

Federal Register A daily publication of the National Archives and Records Administration that updates the Code of Federal Regulations, in which the public may review the regulations and legal notices issued by federal agencies.

Financial sustainability The long-term aspect of financial self-sufficiency. The premise that the Presidio must not only meet short-term self-sufficiency requirements in Fiscal Year 2013, but also be capable of sustaining its operations, performing the necessary building- and infrastructure-related capital improvements, and funding replacement reserves in perpetuity. This requires generating sufficient revenues from leasing and other activities to cover these long-term costs.

Fugitive dust Dust particles that are introduced into the air through certain activities, such as excavation and site preparation during construction or some demolition activities, or use of off-road vehicles or any vehicles operating on open fields or dirt roadways.

General Management Plan Amendment (GMPA) The National Park Service management plan for Area A of the Presidio.

General Objectives of the GMPA A directive of Congress incorporated into the Presidio Trust Act with which the Trust must comply. Because the GMPA text does not explicitly identify general objectives, the Trust Board determined and adopted the General Objectives of the GMPA in Trust Board Resolution 99-11. The General Objectives guide Trust policy and decisions about resource protection and land and building use in Area B of the Presidio.

Geologic hazards Natural geologic processes (e.g., earthquakes) that occur or could potentially occur in locations that present a threat to humans or developed areas.

Green Loosely defined, environmentally conscientious.

Green design Construction practices that significantly reduce the negative impact of buildings on the environment by incorporating features that

reduce energy consumption, conserve natural resources, and reduce pollution.

Greenhouse gases (GHG) Gases that trap heat in the atmosphere. The principal greenhouse gases that enter the atmosphere because of human activities are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Gross building area Total floor area of a building, usually measured from its outside walls.

Groundwater Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated. *See also* surface water.

Habitat The natural environment of an organism or ecological community.

Hardscape That part of a property consisting of structures (patios, retaining walls, walkways, etc.) made with hard materials such as concrete or asphalt.

Hazardous substance A substance that is potentially harmful to human health or the environment.

Hazardous waste A waste with properties that make it dangerous or potentially harmful to human health or the environment.

Historic sites The physical evidences, usually augmented by written documentation, of the Spanish, Mexican, and American occupations of the Presidio. These sites could also include evidence of the Ohlone and other native peoples who occupied the Presidio in the 18th and 19th centuries.

Historic property Any prehistoric or historic district, site, building, structure, or object listed on or eligible for inclusion in the National Register of Historic Places. This also includes artifacts, records, and remains related to and located within such properties.

Historic tax credit Established by the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47), a rehabilitation tax credit equal to 20 percent of the amount spent in a certified rehabilitation of a designated historic structure and that may be used to offset taxes payable.

Historic views Those views and view corridors that existed at the Presidio during its period of significance.

Impact topics Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect on each of these resources are evaluated in the Environmental Consequences section of an EA or EIS.

Indirect effects or impacts Reasonably foreseeable impacts removed in time or place from the proposed action. These are “downstream” impacts, future impacts, or the impacts of reasonably expected connected actions (e.g., growth of an area after a highway leading to it is complete).

Infill construction New construction that is located within an existing developed area, such as a building complex. In the Presidio, infill construction also refers to new development within developable areas.

Infiltration The downward entry of water into the surface of the soil.

Integrity The authenticity of a cultural resource's identity as evidenced by the survival of physical characteristics that were present during the

prehistoric or historic occupation or use. When evaluating National Register of Historic Places eligibility, seven aspects of integrity are assessed: location, design, setting, materials, workmanship, feeling, and association.

Internal trip A trip that both originates and terminates in the Presidio.

Interpretation The telling of a park's resources and history through programs and activities.

Land use controls Administrative and legal tools used to reduce the threat of hazardous substance releases, limit exposure of humans and environmental receptors, supplement engineering remedies, and ensure that engineering controls maintain their integrity and effectiveness. Examples include well drilling prohibitions, digging notifications, and special building permits.

Landfill A waste management unit at which waste is discharged in or on land for disposal.

Lateral spreading A phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

Ldn A day-night average noise level, a 24-hour average L_{eq}; it takes into account the greater annoyance of nighttime noise with a 10-dBA "penalty" added during the hours of 10:00 PM to 7:00 AM.

Lead agency The agency either preparing or taking primary responsibility for preparing the National Environmental Policy Act (NEPA) document.

Lease agreement A written contract between a landlord and a tenant that transfers the right to exclusive possession and use of the landlord's real property to the tenant for a specified period of time and for a stated rent.

LEED® (Leadership in Energy and Environmental Design) Green Building Rating System A voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

L_{eq} The equivalent steady-state sound level, or the average acoustic energy content of noise for a stated period of time. The L_{eq} of two different time-varying noise events are the same if the events deliver the same acoustic energy to the ear during exposure, no matter what time of the day or night they occur, unlike some other measurements that adjust for differences in noise sensitivity at night.

Levantar Meaning "to raise up, awaken, and excite," the draft management strategy that outlines the mission, goals, and programs for archaeology at the Presidio.

Level of Service (LOS) A qualitative measure describing operational conditions within a traffic stream, based on service measures such as delay, speed, and travel time.

Light pollution Outdoor lighting that is directed or reflected to the sky.

Linked trips Internal trips that are made as intermediate stops on the way from an origin to a primary trip destination. For example, a Presidio employee who stops at the post office before traveling home would be a linked trip.

Liquefaction A phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess

pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

Maximum load point The location along a bus route at which the highest level of ridership typically occurs.

Memorandum of Agreement (MOA) A document that, among other conditions, records the terms agreed upon to resolve the adverse effects of an undertaking upon historic properties.

Mitigation A method or measure that, if implemented, would lessen the intensity of an impact on a particular resource.

Mitigation banking The acquisition and preservation of archaeological sites away from the project area in return for doing little or no direct mitigation on sites within the Area of Potential Effects (APE).

Modal split The proportion of trips made by various travel modes, including automobile, transit, bicycle, foot, and other modes.

Mothballing A process through which structures are deactivated for an extended period of time, protected from weather, stabilized, and secured from vandalism.

National Environmental Policy Act (NEPA) Federal legislation enacted in 1969 that establishes the policy that federal entities must take environmental considerations into account in making decisions about federal policies, plans, programs, and projects.

National Historic Landmark (NHL) A nationally significant historic place designated by the Secretary of the Interior because it possesses exceptional value or quality in illustrating or interpreting the heritage of the United States. The Presidio was designated an NHL District (NHLD) in 1962.

National Historic Preservation Act (NHPA) The basic legislation of the national historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. It also authorized the Secretary of the Interior to expand and maintain the National Register of Historic Places, which is composed of districts, sites, structures, and objects significant in American history, archaeology, architecture, engineering, and culture.

NEPA process The process of objectively analyzing a proposed action to determine the significance of its environmental impacts on the human environment, considering alternatives and mitigation to reduce potential impacts, and presenting the analysis to the interested and affected public for review and comment. NEPA process may also be referred to generally as environmental review.

Nitrogen oxides (NOx) Gases formed in great part from atmospheric nitrogen and oxygen when combustion takes place under conditions of high temperature and high pressure. NOx is a criteria air pollutant. *See also* criteria air pollutants.

No action alternative Under the NEPA, a benchmark against which action alternatives are compared.

Noise Unwanted or excessive sound.

Open space As defined in the PTMP, any area that is largely unoccupied by buildings, roads, sidewalks, parking areas, other paved areas, and landscaping around buildings.

Paleosols Former land surfaces with soil development within human history, which are reliable indicators for locations where archaeological remains are possible.

Park A term used interchangeably with the "Presidio" in this document.

Pedestrianize To restrict access to a street to pedestrians only.

Period of significance A defined period of time during which a property established its historical association, meaning, or value.

Permeable surfaces Those surfaces that allow stormwater to infiltrate the underlying soils. Permeable surfaces decrease stormwater runoff and help increase water quality of the ocean and the bay.

Person trip A trip to or from the project made by one person in any mode of transportation: automobile, bus, transit, walking, or bicycle.

Plaza de armas The open space contained within the fortified square of El Presidio, similar to a town square or parade ground. *See also* El Presidio de San Francisco.

PM2.5 "Fine particles" in the air measuring 2.5 micrometers in diameter and smaller. These particles are the major cause of reduced visibility, or haze, in the atmosphere.

PM10 Particles present in the air that are less than 10 micrometers but greater than 2.5 micrometers in diameter. These are "inhalable coarse particles," like those found near roadways and construction areas. Small particles less than 10 micrometers in diameter pose the greatest health risk as they can be inhaled deep into the lungs.

Predicted noise level(s) Future noise levels resulting from predictable natural and mechanical sources and human activity including the project.

Preferred alternative The alternative that the lead federal agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. CEQ regulations require the identification of a preferred alternative in the final EIS. *See also* proposed action.

Presidio Trust A federal, non-profit government corporation created by Congress in 1996 to preserve and enhance the Presidio, a national park site, in cooperation with the National Park Service. As mandated by the Presidio Trust Act (16 USC 460bb appendix, as amended), the Trust must manage the park to become financially self-sufficient by 2013. The Trust has authority to lease property in order to generate revenues needed to operate the park and undertake capital improvements.

Presidio Trust Act The act that establishes the Presidio Trust as a federal government corporation and authorizes the Trust to manage a majority of the Presidio's land area in accordance with the terms of the act.

Presidio Trust Management Plan (PTMP) The Presidio Trust's comprehensive plan adopted in August 2002 that guides future management and implementation of projects within Area B of the Presidio. The PTMP was developed with broad public involvement.

Programmatic agreement A document that records the terms and conditions that have been agreed upon to resolve the adverse effects of an undertaking upon historic properties. Programmatic agreements are particularly useful when effects on historic properties cannot be fully

determined prior to approval of an undertaking, or when activities are routine or repetitive in scope.

Proposed action Under the NEPA, the proposed action may be, but is not necessarily, the agency's preferred alternative. The proposed action may be a proposal in its initial form before undergoing analysis in the EIS process. The agency may or may not have a "preferred alternative" at the draft EIS stage. In that case the agency may decide at the final EIS stage, on the basis of the draft EIS and the public and agency comments, that an alternative other than the proposed action is the agency's preferred alternative. *See also* preferred alternative.

Public participation The process of providing opportunities for community input in the NEPA process.

Record of Decision (ROD) A written public record identifying a selected course of action and explaining why the lead agency has chosen a particular course of action.

Recycling The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace.

Rehabilitation The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey the property's historical, cultural, or architectural values.

Remediation Clean-up of contaminated soils, groundwater, or surface water present at a site in order to reduce pollutants to health-protective levels.

Request for Qualifications (RFQ) / Request for Proposals (RFP) selection process A competitive leasing process with a defined set of selection criteria and stated time period generally consisting of an RFQ, RFP, and negotiation.

Riparian Relating to the banks of a natural course of water. Riparian habitats are diverse and contribute to overall ecosystem health by filtering out pollutants and preventing erosion.

Scope The types of actions to be included in a project, the range of alternatives, and the impacts to be considered.

Scoping The process by which an agency solicits input from the public and interested agencies on the nature and extent of issues, impacts, and alternatives to be addressed in an environmental review document under the NEPA.

Secretary of Interior's Standards for the Treatment of Historic Properties (Secretary of the Interior's Standards) The Secretary of the Interior's best advice on how to protect a wide range of historic properties. Guidelines contained in the standards pertain to both exterior and interior work on historic buildings of all sizes, materials, and types, but are not meant to be case-specific.

Section 106 The section of the NHPA that requires federal agencies to consider the effects of their actions on historic properties and seek comments from an independent reviewing agency, the Advisory Council

on Historic Preservation. The purpose of Section 106 is to avoid unnecessary harm to historic properties.

Section 110 The section of the NHPA that sets out the broad historic preservation responsibilities of federal agencies to ensure that historic preservation is fully integrated into ongoing programs.

Section 213 Report A report intended to provide useful, independent, and authoritative information to consulting parties regarding a historic property that is the subject of the Section 106 consultation process. It provides a vehicle for the NPS to share its expert opinions on the significance of a historic property, the effects of the proposed undertaking on the property, and the recommendation of measures to avoid, minimize, or mitigate adverse effects to the property. The report can be used as a tool in the Section 106 consultation and is made public record.

Self-sufficiency The requirement, mandated by Congress, that the Trust generate sufficient revenues at the Presidio to support Area B operations without continuing federal appropriations, beginning in Fiscal Year 2013 and every year thereafter. Self-sufficiency has both a short-term and long-term aspect. *See also* financial sustainability.

Solid waste Garbage, refuse, sludge, or other discarded material, including solids, semisolids, liquids, and contained gaseous materials.

State Historic Preservation Officer (SHPO) The state official, as defined in 36 CFR 60, responsible for liaison with federal agencies in implementing the appropriate provisions of the National Historic Preservation Act of 1966, as amended. The SHPO is an essential part of the consultation process regarding the effects of Trust undertakings on historic properties

State Implementation Plan United States Environmental Protection Agency (U.S. EPA)-approved state plans for attaining and maintaining federal air quality standards.

Stormwater Surface water runoff and drainage associated with storm events.

Stormwater Pollution Prevention Plan (SWPPP) A set of protocols developed and implemented to address specific stormwater discharge concerns and often developed for construction sites.

Street wall A line of building facades that creates a mostly uniform and continuous wall facing the street.

Surface water Water that naturally flows or settles on top of natural landforms and vegetation. It is often manifest as freshwater rivers, streams, and lakes.

Sustainability & sustainable To create and maintain conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations. *See also* the equally loose terms green and green design.

Threshold of hearing The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Tiering The coverage of general matters in broad EISs with subsequent narrower EISs or EAs incorporating by reference the general discussions and concentrating solely on the issues specific to the subsequent project-specific action.

Toxic Air Contaminant (TAC) An air pollutant, identified in regulation by the California Air Resources Board, that could cause or contribute to an increase in deaths or in serious illness, or could pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code 39650 et seq.) from pollutants subject to California Ambient Air Quality Standards. Health effects due to TACs can occur at extremely low levels. It is typically difficult to identify levels of exposure that do not produce adverse health effects.

Transportation Demand Management (TDM) Strategies designed to maximize the people-moving capability of the transportation system by increasing the number of persons in a vehicle, or by influencing the mode of, time of, or need to travel. To accomplish these types of changes, TDM programs must rely on incentives or disincentives to make these shifts in behavior attractive.

Trip generation rate A rate or number that expresses the number of person trips that would be generated by a unit (e.g., square foot or dwelling unit) of a given land use type.

Undertaking A type of federal activity that has the potential to affect historic properties.

Vehicle trip A trip to or from the project made by a transportation vehicle, primarily automobile. Equal to the number of person trips made by automobile divided by the average numbers of persons per automobile.

Viewshed The geographic area from which a site is visible; a collection of viewpoints.

Visitor experience The perceptions, feelings, and reactions a person has while visiting a park.

Visual character A term used to give context and to define a sense of place; generally comprised of elements such as building scale, height, architectural features, colors, building ensemble patterns, designed landscapes, and open spaces.

Waste stream Waste material output of a community, region, or state.

Watershed An area of land that drains or sheds its rainwater and springs into a body of water such as a stream or lake.

Wetlands Those areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

Index

(**Bold** page numbers indicate figures)

A – C

agencies and persons contacted, 243
agency consultation. *See* consultation
air quality, S-7, 96–106. *See also* global climate change; greenhouse gas emissions; Climate Friendly Parks program
  basic control measures for dust emissions, 104
  conditions, 97
  construction equipment exhaust measures, 105
  cumulative impacts, 208, 223
  deconstruction/demolition techniques, 105
  emissions from vehicle trips and area sources, 101
  environmental consequences, 99–106
  general conformity, 100
  impacts in general, S-7
  local sources of air pollution, 97
  management, 96
  methodology, 99
  mitigation measures, 104
  monitoring, 97
  transportation control measures, 105
alternatives, S-2, S-3, 13–39
  circulation for, 20, **22**, 27, **29**, 31, **33**, **38**
  comparison of, 14
  eliminated from detailed study, 37
  History Center (Alternative 3), S-5, 28–31, **30**
  key proposals under, 14
  Main Post Update (Alternative 2), S-4, 21–28, **23**
  mitigated preferred alternative, S-2, 1, 21
  modifications to preferred alternative, S-1
  no-action, 14
  open space, 25, 31, 34
  PTMP Visitor and Community Center (Alternative 1), S-4, 13–21, **16**
  public uses, 24, 28, 34
  selection of, S-13,
  Status Quo (Alternative 4), S-5, 31–38, **35**
  summary of, S-3
archaeology, S-9, 139–158, 223. *See also* El Presidio
  archaeological research design, 155
  archaeological testing and treatment plan, 155
  archival research, 146
  avoidance, 155
  creative mitigation, 156
  cumulative impacts, 216–217, 223
  curation of archaeological collections, 156
  data recovery, 155
  discoveries, 156
  environmental consequences, 143–158

geo-archaeological research, 147
GIS analysis, 147, **148**
historic sites, 140
impacts in general, S-9
methodology, 145
mitigation measures, 154
monitoring, 155
National Historic Landmark District review, 146
predicted archaeological features, 140, **141**, **142**, 144
prehistoric sites, 139
subsurface testing, 147, **149**
Archaeology Center, 46, 50, 131
Area of Potential Effects. *See* historic resources
areas of controversy. *See* controversy
bicycle facilities. *See* pedestrian and bicycle facilities
biological resources, 227
bowling center. *See* Presidio Bowling Center
Climate Friendly Parks program, 102, 105
comments. *See also* public involvement
on Main Post Update draft SEIS, 235
on supplement to the Main Post Update draft SEIS, 236
connected actions. *See* tiering
construction traffic, 88
management plan, 94
consultation, S-14, 128, 137, 238
controversy, S-5
Crissy Field (Area A), 44, 122
Center, 44, 203
cultural resources. *See* archaeology; El Presidio; historic resources
cumulative impacts, S-12, 203–222
actions, 203, **204**
contribution of mitigated preferred alternative and other alternatives to, 205–222
impacts in general, S-12
resources affected, 203
summary of final PTMP EIS impact analysis, 203

D – F

demolition, 14
Doyle Drive, 18, 125, 205, 213
El Presidio, 27, 51. *See also* archaeology; contemporary art museum; Levantar; parking; visual resources
archaeological management strategy for, 36, 162
description, 32
employment. *See* population, employment and housing
energy, 228
environmental justice, 230
fire hazards, 230
flooding, 228

G – I

geology and soils, 226
global climate change, S-8, 98, 102, 225
green practices, 5
greenhouse gas emissions, 98
guest rooms, 15
hazardous materials, 229
Herbst International Exhibition Hall, 44
Heritage Center, 17, 24, 50
History Center, 28, 48, 135
historic resources, S-8, 114–138
Area of Potential Effects, **115**
changes
in existing NHLD resources, 117
to the landscape since 1994, **123**

to the built environment since 1994, **124**
Cold War-era, 121
cumulative impacts, 210–216, 223
environmental consequences, 127–138
impacts in general, S-8
Main Post
construction history and resources, 117
design, materials, and workmanship, 126
feeling and association, 127
integrity of National Register property, 125
location and setting, 127
methodology, 127
mitigation measures, 136
overview, 117–125
treatment of, S-14
2008 NHL Update, 116
housing. *See* population, employment and housing
hydrology. *See* water resources
impacts
cumulative. *See* cumulative impacts
non-significant, 225–231
other, 223–231
irreversible or irretrievable commitments of resources, 225
related to site productivity and use of nonrenewable resources, 224
short-term uses of the environment vs. maintenance and enhancement of long-term productivity, 224
significant and unavoidable, 223
International Center to End Violence, 205
issues to be resolved, S-13

J – L

land use, S-5, 41–48
context, 41
cumulative impacts, 206
environmental consequences, 44–48
existing building uses, 42, **43**
impacts in general, S-5
methodology, 44
mitigation measures, 48
monitoring of Area B uses, 48
open space, 41
plans and policies, 49–53. *See also* Presidio Trust Management Plan
surrounding land uses, 44
Leadership in Energy and Environmental Design (LEED), 5. *See also* green practices
Letterman Digital Arts Center, 205
Levantar, 151. *See also* El Presidio
lodge, lodging, 17, 24, 47, 52

M – O

Main Parade, 20, 41, 205
Main Post Tennis Court, 25, 191. *See also* recreation
major conclusions, S-5–S-13
Marina district, 44
mitigation measures
choice of, S-14
Montgomery Street Barracks buildings, 47
Muni. *See under* public transit services
National Historic Landmark District, 114, 117, 146, 211. *See also* archaeology; historic resources
National Historic Preservation Act. *See* consultation

new construction, 14
NEPA
coordination with NHPA, 9–11
next steps, S-14
noise, S-8, 107–113
control regulations and programs, 107
cumulative impacts, 209
environmental consequences, 110–113
existing conditions, 108
FHWA noise abatement criteria, 108
from
construction equipment, 110, 111, 113
special events, 112
stationary sources, 112
traffic, 111
impacts in general, S-8
methodology, 116
mitigation measures, 113
monitoring and attenuation, 113
San Francisco Noise Ordinance, 107
sensitive areas, 109, 113
short-term measurements, 109
traffic noise reduction, 113
open space. *See* land use

P – R

parking, S-6, 80–83
conditions, 63
cumulative impacts, 208
current use, 64
deficit, 83
demand, 71, 73, 83
impacts in general, S-6, 80
impact on El Presidio site, 153
management, 92
mitigation measures, 92
special event parking management, 93
supply by alternative, 15, 82, 83
pedestrian and bicycle facilities, 62
impacts on, 83
mitigation measure, 93
persons consulted, 243
police services, 230
population, employment and housing, 227
preparers. *See* report preparers
PresidiGo Shuttle. *See* public transit services
Presidio Bowling Center, 25, 42, 191.
Presidio Chapel, 18, 46, 50, 131
Presidio Historical Association. *See also* History Center
proposal for History Center, 28
Presidio Lodge. *See* lodge, lodging.
Presidio Theatre, 28, 46, 50, 131
Presidio Trust, S-1, S-14, 1
headquarters, 42
Presidio Trust Management Plan, S-1, 1, 50
amendment of, 1, 50
consistency with, S-6, 49–52
Programmatic Agreement for the Main Post Update. *See* consultation.
Public Health Service Hospital, 205
public involvement, S-14, 233–237
public transit services, 59
impacts on, 84
mitigation measures, 93
monitoring program, 94
Muni, 62, 63, 85
ridership, 61, 87

support for increased Muni frequencies, 93
public transportation. *See* public transit services
purpose and need, 1–11
actions related to, 2
objectives, 2–5
statement of need, S-1, 1
Record of Decision (ROD), S-14, S-15
recreation, S-11, 191–193. *See also* Main Post Tennis Court; Presidio Bowling Center
cumulative impacts, 220
environmental consequences, 192–193
facilities, 27, 31
impacts in general, S-11
methodology, 192
mitigation measures, 193
report preparers, 241

S – U

San Francisco General Plan, 52
schools, 227
scoping, 233
issues raised during scoping for
Art Museum, 234
Main Post Update SEIS, 234
Presidio Lodge EA scoping, 233
Secretary of the Interior's Standards. *See* historic resources
Section 106 (of the NHPA). *See* consultation
solid waste, 228
stormwater. *See* water resources
summary, S-1–S-15
Supplemental Environmental Impact Statement (SEIS), 6
sustainable design. *See* green features
Tennessee Hollow, 125, 205
tennis court. *See* Main Post Tennis Court
Thornburgh buildings, 205
tiering, 6
traffic. *See also* transportation
characteristics, 55
impacts due to construction. *See* construction traffic
impacts in general, 73
mitigation measures, 89, 90
transit services. *See* public transit services
transportation, S-6, 54–95
cumulative impacts, 206–208
environmental consequences, 64–95
impacts in general, S-6
intersection
analysis, 55, 74
operating conditions, 60
unacceptable levels, 78, 91
gateway traffic, 69, 70
key roadways, 54
levels of service, 75, 76
Main Post trip generation. *See* trip generation
methodology, 64
mode split, 68
roadway network, 54
significance criteria, 74, 77
study intersections, 58, **57**
travel demand, 64
trip distribution, 67
trip generation, 65, 66, 70
vehicle occupancy, 68, 72
transportation demand management (TDM) program, 68
monitoring, 93

V – Z

visitation, S-10, 183–190
annual, 200
cumulative impacts, 218
environmental consequences, 186-190
impacts in general, S-10
limitations of visitor opportunities, 189
management controls, 189
methodology, 186
mitigation measures, 189
monitoring of visitor levels, 190
prohibitions on visitor uses, 189
special events, 189
to Main Post, 184
visitor facilities, information, services, 184
visitor experience, 183. *See also* visitation
visual resources, S-10, 159–182
character, 159
criteria, 162
cumulative impacts, 217
environmental consequences, 161–182
field studies, 161
impacts in general, S-10
methodology, 161
mitigation measures, 182
simulations, 161, **164**, **166**–**169**, **171**–**173**, **175**–**177**, **179**–**181**
views, 160, **163**
Walt Disney Family Museum, 205
water resources, S-11, 194–202
best management practices, 199
cumulative impacts, 220
environmental consequences, 196–202
groundwater discharge, 202
groundwater hydrology, 195
impacts in general, S-11
impervious area, changes in, 198
methodology, 196
mitigation measures, 201
quality, 196
storm drainage, 194
stormwater
control, 202
drainage system upgrades, 202
pollution prevention, 202
runoff, changes in, 199
supply, 228
surface hydrology, 194
wastewater, 228
wetlands, 210