



FIGURE 19. BUILDING 1801, ALTERNATIVE 2 (Non-historic Wings Reduced in Height)

Source: Presidio Trust, 2004

New construction of a small residential building at the south end of Wyman Avenue and of another residential building at the north end of the Central Green (see Figure 20) would change the visual appearance in these areas of the lower plateau, but would be designed to conform to PTMP planning district guidelines and to be compatible with surrounding buildings.

Views to and from the PSHH district would not change dramatically, although re-cladding the non-historic wings of the PSHH would remove the blue façade material, which is jarring to some contemporary viewers, and removal of the central loggia/lobby as well as possibly some floors of the wings would reduce the visual bulk of the building when viewed from the south. Introduction of underground parking would increase green space, particularly in front of the PSHH. In addition, the planned use of 14<sup>th</sup> Avenue as an entrance to the PSHH district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PSHH would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Interior lighting within area buildings would be visible from surrounding areas, but would not exceed levels common and accepted in residential neighborhoods, although the size of the building would mean that lighted windows would be visible from several blocks south on 15<sup>th</sup> Avenue. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

#### **3.7.2.4 Alternative 3: No Infill Alternative**

Similar to Alternative 1 and Alternative 2, Alternative 3 would rehabilitate and reuse existing buildings, improve the surrounding landscape, and accommodate planned access and open space improvements, positively affecting the visual character of the PSHH district. Chain link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced, parking areas would be re-landscaped, and open space areas would be improved. In addition, Alternative 3 would remove non-historic additions to the PSHH, dramatically changing the building's appearance (see Figure 21). This would represent a beneficial visual impact above and beyond those described for Alternatives 1 and 2 above.

Other views to and from the PSHH district shown in Figures 14 to 16 would not change dramatically as a result of Alternative 3, because no new construction would occur. Removal of the non-historic wings of the main hospital would increase green space in front of the PSHH. Also, the planned use of 14<sup>th</sup> Avenue as an entrance to the PSHH district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PSHH would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Interior lighting would be visible but not intrusive when viewed from adjacent areas. Lighted windows would be visible from several blocks south on 15<sup>th</sup> Avenue, but with removal of the non-historic wings, the windows would be about 100 feet (about one quarter of a block)



FIGURE 20. VIEW LOOKING NORTH FROM THE CENTRAL GREEN, ALTERNATIVES 2 AND 4

Source: Presidio Trust, 2004



FIGURE 21. BUILDING 1801, ALTERNATIVES 3 AND 4 (Non-historic Wings Removed)

Source: Presidio Trust, 2004

farther away from the viewer than in Alternatives 1 and 2. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

### **3.7.2.5 Alternative 4: Battery Caulfield Alternative**

Similar to Alternatives 1, 2, and 3, Alternative 4 would rehabilitate and reuse existing buildings, improve the surrounding landscape, and accommodate planned access and open space improvements, positively affecting the visual character of the PSHH district. Chain link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced, parking areas would be re-landscaped, and open space areas would be improved. Similar to Alternative 3, non-historic additions to the PSHH would be removed, dramatically changing the building's appearance (see Figure 21), and similar to Alternative 2, new residential construction would be introduced at the north end of the Central Green on the lower plateau (see Figure 20). Finally, Alternative 4 would also introduce new residential construction at Battery Caulfield (see Figure 22).

Removal of non-historic additions to the front of the main hospital would represent a beneficial visual impact, when compared to the Requested No Action Alternative and Alternatives 1 and 2, because the historic façade of the main hospital building would be more visible. Also, removal of the non-historic additions would increase green space in front of the PSHH. Similar to Alternative 2, new building on the lower plateau would be designed to conform to PTMP planning district guidelines and to be compatible with nearby historic buildings.

New construction on the upper plateau would replace heavy equipment, stock-piled soil, and other materials, and would be scaled to be compatible with nearby Building 1450 and nearby non-historic housing. Buildings would step up the site using existing grades and would not exceed two stories in height. The presence of residential buildings at Battery Caulfield would change the visual appearance of the area as well as distant views to and from the upper plateau. Changes to distant views would be mitigated to a large extent by the forested area immediately behind the PSHH, which provides a backdrop for the building and a visual buffer between the lower and upper plateaus.

As in other alternatives, the planned use of 14<sup>th</sup> Avenue as an entrance to the PSHH district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PSHH would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Interior building lighting on the lower plateau would be visible but not intrusive when viewed from adjacent areas, similar to Alternative 3. On the upper plateau, interior lighting would resemble that associated with existing dwelling units west of Battery Caulfield Road. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.



FIGURE 22. VIEW TOWARD BATTERY CAULFIELD, ALTERNATIVE 4

Source: Presidio Trust, 2004

### **3.7.2.6 Park Presidio Boulevard Access Variant**

The addition of direct access between the PHSH district and Park Presidio Boulevard under Alternatives 1, 2, 3, or 4 would involve modifications to existing landscaping, roads, and possibly retaining walls in the immediate area but would not substantially change the visual character of the PHSH district. The new, signalized intersection would be used mostly by traffic exiting the district, and motorists would be treated to a view of Mountain Lake to the east. Recreational users within Mountain Lake Park and adjacent areas of the Presidio may be able to see the new traffic signal, but their auditory and visual experience is already largely informed by Park Presidio Boulevard traffic, and this would not change.

### **3.7.2.7 Cumulative Effects**

When considered in combination with planned improvements within the Presidio, all alternatives for the PHSH district would result in positive visual changes due to their emphasis on rehabilitating and reusing buildings on the site and their contribution to landscaping and other site improvements.

New buildings would be sited and scaled to avoid substantial visual impacts, and increases in lighting would be monitored as agreed to during the PTMP environmental review process. Even Alternative 4, which would add new buildings on the site of a Trust and NPS maintenance yard, would represent a positive visual change when viewed in the context of the PTMP's commitment to remove non-historic housing west of Battery Caulfield Road over time, thereby increasing open space in the park by about 100 acres.

## **3.7.3 MITIGATION MEASURES**

No significant impacts related to visual resources have been identified and no mitigation measures were identified in the PTMP EIS regarding visual resources. (Mitigation Measure NR-7, listed at the end of Section 3.12, Biology, addresses artificial lighting.) No additional measures have been identified.

## **3.8 Visitor Use**

### **3.8.1 AFFECTED ENVIRONMENT**

The visitor experience, including interpretation/information facilities, interpretation programs, visitor facilities, visitor services, and park-based programs, are described on pages 158 to 161 of the PTMP EIS. This description is incorporated here by reference, and portions relevant to the PHSH district are summarized below and expanded upon as necessary.

#### **3.8.1.1 Existing Presidio-wide Visitor Facilities, Services, and Programs**

The Presidio as a whole has a number of facilities geared to park visitors, ranging from the NPS visitor center to informational kiosks and wayside signs, meeting venues, exhibition halls, and single-purpose

facilities like the park archives and the archaeology lab. The park also has a number of existing services, events, and programs offered to visitors by the NPS, the Trust, and Presidio tenants.

Primary visitor destinations within the Presidio include Crissy Field (Area A) and Baker Beach, meeting and exhibition venues such as the Officers' Club and the Golden Gate Club, and recreational facilities such as the Presidio Golf Course, the YMCA, and the trails and bikeways throughout the park. In total, the Trust estimates that the Presidio receives approximately 4.6 million visitors a year, including 2.6 million within the area under Trust jurisdiction (Area B). The 4.6 million visitors represent more than 25 percent of the visitors to the entire Golden Gate National Recreation Area as a whole (including Muir Woods, Fort Point, and the Maritime Museum).<sup>19</sup>

### **3.8.1.2 Existing and Planned Facilities, Services, and Programs in the PSHH District**

The PSHH district currently contains few visitor amenities. The district is used by visitors associated with the tenants in the district (e.g., Arion Press) and visitors who are aware of existing trails in the area. These trails connect the PSHH district to Mountain Lake on the east and Lobos Valley on the west, and pass through the abundant bird habitat in the Nike Swale area below Battery Caulfield. Areas of both the lower and upper plateaus, including areas around unoccupied buildings and around the Nike Swale, are currently fenced to prevent access. Visitor orientation is provided at an informational kiosk uphill from the 15<sup>th</sup> Avenue Gate.

In the future, the number of trails and the number of visitor programs and amenities are projected to increase in conformance with the PTMP and the Presidio Trails and Bikeways Master Plan adopted in 2003. Specifically, the existing trails will be extended to provide better connections to adjacent areas of the Presidio, and a trailhead and scenic overlook will be developed west of the PSHH. The trailhead may include a public restroom, as well as informational signs. Other informational and interpretive signs will be provided throughout the PSHH district, and signs, an exhibit, and/or a landscape treatment will commemorate the site of the former Marine Hospital Cemetery behind Building 1801.

## **3.8.2 ENVIRONMENTAL CONSEQUENCES**

The potential impacts of use and development within the Presidio on the visitor experience are assessed on pages 292 to 296 of the PTMP EIS. No impacts are identified within the PSHH district. Overall, the number of park visitors is projected to increase to 7.2 million annually in Area B.

### **3.8.2.1 Requested No Action Alternative**

The Requested No Action Alternative would leave much of the lower plateau in the PSHH district unimproved and off-limits to visitors. Fencing around the main hospital building would remain, and the building would be boarded up, as would the Wyman Avenue houses. Both areas would be visible from the Park Boulevard Trail, which would extend through the site in conformance with the Presidio Trails and Bikeways Master Plan. In general, the deteriorated condition of the area under the Requested No

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<sup>19</sup> Trust and NPS estimates cited in the PTMP EIS, Volume 1, page 158.

Action Alternative would continue to detract from the use and enjoyment of surrounding areas of the park.

### **3.8.2.2 Alternative 1: PTMP Alternative**

Rehabilitation and reuse of buildings in the PHSH district would improve the attractiveness of the area, and therefore enhance the visitor's experience. Alternative 1 would also facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and other aspects of the visitor experience, resulting in beneficial impacts. Following the construction period, open space areas on the lower plateau would be opened to the public, as would the lobby of Building 1801.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the site of the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of the PHSH.

Arion Press would continue to offer its current array of public programs and exhibitions, and new education-related tenants would also offer programs to park visitors and residents. The Trust or the NPS would offer periodic tours or site walks, and stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and the area known as "Quail Commons" north of Battery Caulfield. Battery Caulfield itself would remain fenced and off-limits to the public for an indefinite period, because it would remain in use as a maintenance yard.

Residential and educational uses in Alternative 1 would dramatically increase the level of activity at the site when compared to the Requested No Action Alternative, particularly during the daytime when students associated with educational uses are present. Some of this activity could spill over into adjacent areas of the Presidio if students and residents take advantage of trails and open space in the area. Mitigation measures from the PTMP EIS would ensure that visitation levels are monitored and management controls implemented if necessary to protect park resources. Sufficient parking and access would be provided so that tenant activities would not preclude visits by the general public, and visitors could expect to feel safer than they do today because there would be fewer vacant buildings and more activity. In general, increased use and visitorship are viewed as positive consequences of the Presidio's transfer from the Army to active civilian use.

### **3.8.2.3 Alternative 2: Infill Alternative**

Similar to Alternative 1, Alternative 2 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHSH district, making the park more appealing to visitors than the Requested No Action Alternative. Alternative 2 would also facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the site of the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of Building 1801.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons. Battery Caulfield itself would remain fenced and off-limits to the public for an indefinite period, because it would remain in use as a maintenance yard.

Alternative 2 would have more residents than Alternatives 1, 3, and 4, but would generate less overall activity on the site than Alternative 1. Residents and associated visitors would be expected to take advantage of trails and open space in the area, but would not preclude visits by the general public. Based on San Francisco averages, about 75 of the residents in Alternative 2 would be school-age children (about half of them below the age of 10), some of whom could make use of playgrounds at Mountain Lake Park, Julius Kahn Playground, and elsewhere in the Presidio. Children and other park visitors could expect to feel safer than they do today because there would be fewer vacant buildings and more activity at the site. Mitigation measures from the PTMP EIS would ensure that visitation levels are monitored and management controls implemented if necessary to protect park resources. In general, increased use and visitorship are viewed as positive consequences of the Presidio's transfer from the Army to active civilian use.

#### **3.8.2.4 Alternative 3: No Infill Alternative**

Similar to Alternatives 1 and 2, Alternative 3 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHS district, improving the appearance of the area and therefore the visitor experience. Alternative 3 would also facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of Building 1801.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons. Battery Caulfield itself would remain fenced and off-limits to the public for an indefinite period, because it would remain in use as a maintenance yard.

Alternative 3 would incrementally increase the level of activity at the site when compared to the Requested No Action Alternative, but would include more residents and fewer educational uses, so

activity on the site would be less concentrated during the daytime. The presence of residents and associated visitors would not preclude visits by the general public, and the public would tend to feel safer when vacant buildings are occupied. Mitigation measures from the PTMP EIS would ensure that visitation levels are monitored and management controls implemented if necessary to protect park resources. In general, increased use and visitorship are viewed as positive consequences of the Presidio's transfer from the Army to active civilian use.

#### **3.8.2.5 Alternative 4: Battery Caulfield Alternative**

Similar to Alternatives 1, 2, and 3, Alternative 4 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHSH district, improving the appearance of the lower plateau. Alternative 4 would also facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Alternative 4 would convert the maintenance yard at Battery Caulfield to use as a residential area, providing some accessibility for visitors. Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of the PHSH.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons.

Alternative 4 would increase the level of activity on the site when compared to the Requested No Action Alternative, but would generate less overall activity than most other alternatives. Some of this activity could spill over into adjacent areas of the Presidio if residents take advantage of trails and open space in the area as expected. Spill-over activity in sensitive habitat areas around Battery Caulfield would require particular attention as the Trust implements mitigation measures from the PTMP EIS designed to ensure that visitation levels are monitored and management controls implemented if necessary to protect park resources. In general, increased use and visitorship are viewed as positive consequences of the Presidio's transfer from the Army to active civilian use.

#### **3.8.2.6 Park Presidio Boulevard Access Variant**

Providing direct vehicular access between Park Presidio Boulevard and the PHSH district would increase the accessibility of the park, which would be an improvement for park visitors arriving (and departing) by auto. Pedestrians and bicyclists would be prohibited from using the new intersection, but would experience safety improvements at the nearby intersection of Lake Street and Park Presidio Boulevard.

Provision of the new access would necessitate adjustments to the south end of Park Boulevard, a multi-use trail and service road that connects the PHS district to Mountain Lake. Pedestrians would be routed to sidewalks and crosswalks in the vicinity of Building 1808, and bicyclists would be routed to local roads and/or a multi-use trail connection providing east-west access across the lower plateau as shown in the Presidio Trails and Bikeways Master Plan.

### **3.8.2.7 Cumulative Effects**

When combined with improvements anticipated throughout the Presidio as part of the PTMP, the GMPA (for shoreline portions under NPS jurisdiction), and the Presidio Trails and Bikeways Master Plan, the PHS project would improve the visitor experience. Improvements would include increased access within developed areas of the park, improved trails and bikeways, additional interpretive and orientation materials, and additional opportunities for park programs provided by the Trust, the NPS, and park tenants.

Increased levels of activity and park visitorship associated with improvements in the PHS district would fall well within cumulative levels described and analyzed in the PTMP EIS.

## **3.8.3 MITIGATION MEASURES**

The following mitigation measures are adapted from the PTMP EIS section regarding the visitor experience and were adopted as conditions of approval at the end of the PTMP planning and environmental review process. Implementation of these measures will address the proposed action's contribution to potentially significant cumulative impacts in all alternatives.

*CO-4 Limitation 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 Use* – The Trust will prohibit visitor uses that impair park resources or values or unreasonably 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 would be made to the way the activity is conducted, including placing limitations on the activity, so as to eliminate unacceptable impacts. Any restrictions would 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 *Monitoring of Visitor Levels* – The Trust will monitor visitation levels to ensure that park uses do not unacceptably affect Presidio resources, including visitor experience. Visitor carrying capacities for managing visitor use will be identified if necessary.

NR 14 *Visitor Management* – The Trust will monitor visitor numbers and use in the vicinity of the wetlands on the upper plateau (Nike Swale area) and will take steps to reduce or eliminate related impacts as necessary. Informational leaflets, signs, and regulatory measures will be employed as necessary.

## 3.9 Utilities and Services

### 3.9.1 AFFECTED ENVIRONMENT

The Presidio’s infrastructure and utilities are described on pages 184 to 192 of the PTMP EIS. Public safety-related services are described on pages 166 and 167. These descriptions are summarized and expanded upon below, where relevant to the PSHH district.

#### 3.9.1.1 Water Supply and Demand

The Trust operates a facility that treats water from nearby Lobos Creek to provide potable water to the park under permit from the California Department of Health Services (DHS).<sup>20</sup> Supplemental water is purchased from the City and County of San Francisco (CCSF) as needed. Similar to Presidio supplies, the amount of CCSF water used varies significantly based on the type of water year. Between 1999 and 2003, CCSF provided between 6 and 18 percent of the total water consumed at the park, and the remainder was provided by Lobos Creek. During this period, use of CCSF water ranged from 0 gallons per day in the winter and spring to 1 million gallons per day (mgd) at the peak of the dry season.

The San Francisco Public Utilities Commission (SFPUC), the CCSF department that provides water to San Francisco and surrounding communities, estimates that the current total demand for water from its system is approximately 90 mgd. In its Urban Water Management Plan, the SFPUC identifies the Presidio as a “retail customer,” with an estimated daily demand of 1 mgd through the year 2020 (SFPUC 2001). Because the Presidio is a retail customer, the purchase and use of water from the SFPUC is subject to its water shortage regulations, including mandatory water rationing programs and rate structures adopted during drought conditions.

The Trust is committed to reducing the demand for off-site water resources by conserving water and by implementing water recycling in northern and eastern sections of the park (see PTMP, page 55). Phase one of the Trust’s water recycling plant, which is currently under construction, will provide approximately 200,000 gallons per day (gpd) for irrigation purposes, reducing dependence on Lobos Creek and CCSF water.

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<sup>20</sup> Provision 11 of the permit stipulates that, to help protect water quality within the Lobos Creek Valley, the use of reclaimed water within the PSHH district is prohibited (DHS 1997).

The PHSB site receives water from the Trust system from the north and the CCSF system to the south. Presently, one of the three CCSF lines, a 10-inch line entering the site from 15<sup>th</sup> Avenue, serves as a fire connection with 70 pounds per square inch (psi) of static hydrant pressure. The CCSF water system is in fair to good condition.

Based on water demand estimates developed for the PTMP EIS, current average daily water use within the PHSB district is 6,800 gallons. The PTMP EIS estimates that the future Presidio-wide average daily demand for water would be 0.72 million gallons.

### **3.9.1.2 Wastewater Treatment and Disposal**

All of the on-site sanitary sewer mains from the PHSB district run south to the CCSF combined sewer system in 14<sup>th</sup> Avenue and then to Lake Street, which routes wastewater to the CCSF's Oceanside Water Pollution Control Plant (OSP), the City's newest treatment plant (and one of the few plants in the United States built largely underground). OSP meets all federal and state discharge standards. Approximately 95 percent of the pollutants are removed from the wastewater stream before discharge into the Pacific Ocean through the 4.5-mile Southwest Ocean Outfall. During peak wet weather, OSP treats 60 mgd from the city's west side. Average dry weather flow is approximately 17.5 mgd. OSP has a maximum treatment plant capacity of 65 mgd.

Given their age, the joints of the sewer mains within the PHSB district may allow inflow and infiltration, which could increase flows to OSP during the wet season.

Based on estimates developed in the PTMP EIS, current average daily wastewater flows within the PHSB district are 6,000 gpd. The PTMP EIS estimates that the Presidio is expected to generate 0.65 mgd annually at full occupancy.

### **3.9.1.3 Storm Drainage**

The on-site storm water collection system drains to the 17<sup>th</sup> Avenue system, which connects to the Richmond Transport system, part of the City's combined sewer system. Most of the piping is in good condition; however, several sections are crushed and in need of repair. The district does not experience flooding problems.

### **3.9.1.4 Solid Waste**

The Trust handles solid waste disposal through contracts with the Golden Gate Disposal and Recycling Company, a subsidiary of Norcal Waste Systems, Inc. Currently, the Presidio generates approximately 2,250 tons of waste per year. Discards are delivered to a transfer station run by Sanitary Fill Company, which is also owned by Norcal Waste Systems, Inc. Close to 90 percent of the waste is transferred from Norcal Waste System Inc.'s transfer station to USA Waste's Altamont Landfill, located in Alameda County 62 miles southeast of San Francisco. The balance of the waste ends up in 15 to 20 other landfills in the region. At the current rate of disposal, the Altamont Landfill capacity is sufficient through 2008. However, if the region's diversion rate increases to 50 percent by 2005, this will extend the capacity of the landfill until 2011.

Using estimates developed by Golden Gate Disposal and the Trust in coordination with the CCSF, Presidio residents are expected to generate 3,400 tons per year at full occupancy.<sup>21</sup> To minimize the park's impact on the solid waste stream, the Trust has initiated a comprehensive waste reduction and recycling program, which includes recycling, outreach and education, and in-house salvage, compost, and regeneration programs. The program received a WasteWise Program Champion Award from the EPA. According to the EPA and Golden Gate Disposal, in 2002 the Presidio diverted over 67 percent (1,500 tons of material, including organics) from the waste stream.

### **3.9.1.5 Gas System**

Pacific Gas and Electric Company (PG&E) owns and maintains the gas infrastructure at the Presidio, including the PSHH district. An existing high-pressure gas line extends from 14<sup>th</sup> Avenue into the district and fires a boiler system at Building 1802. Based on estimates developed for the PTMP EIS, Presidio-wide development under the PTMP would generate demand for up to 2.30 million therms of natural gas annually.

### **3.9.1.6 Electrical System**

PG&E provides high-voltage electric service to the district. Power comes through the 14<sup>th</sup> Avenue Gate and feeds Buildings 1801 and 1802, where it is "stepped down" to a usable voltage and delivered to other buildings within the district. PG&E recently installed a 12,000-volt line at 14<sup>th</sup> Avenue and Lake Street.

PG&E is in the process of replacing overhead electric facilities with underground lines on 14<sup>th</sup> and 15<sup>th</sup> Avenues and other streets within the Mid-Lake District as part of its Rule 20 Undergrounding Program. The costs for undergrounding will be recovered through electric rates after the project is completed (expected by the fourth quarter 2004).

Based on estimates developed for the PTMP EIS, up to 50.24 million kilowatt-hours of electricity would be consumed at the Presidio annually at full occupancy.

### **3.9.1.7 Fire Protection and Emergency Response**

Presently, the Presidio Fire Department provides fire prevention and protection, fire suppression, rescue, and emergency medical services to the Presidio through an interagency agreement with the NPS. The Presidio Fire Department maintains two fire stations within the GGNRA, one located on the Main Post and the other in the Marin Headlands. Fire Station 51 (Main Post) houses one engine company, one truck company, one paramedic (advanced life support or ALS) ambulance, and one command vehicle. Each day, between seven and ten firefighters are on duty, with an assistant chief on duty to supervise operations and serve as the incident commander. In 2003, the Presidio Fire Department responded to over 1,100 calls for service. Calls for service within Area B numbered 660. Of this number, 90 percent of the calls for service were for emergency medical services.

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<sup>21</sup> Based on the average amount of garbage generated in a single-family home in San Francisco: 35 pounds per week or approximately 1,800 pounds per year.

The National Fire Protection Association (NFPA) establishes the standards, requirements, and recommended practices for fire departments in the United States. The NFPA also establishes the Fire Codes and the Life Safety Codes used by the NPS and the Presidio Fire Department. NFPA 1710 establishes the minimum number of on-duty personnel, the minimum number of fire apparatus, and the minimum response times to areas within the department's jurisdiction. This standard provides guidance to the Presidio Fire Department and helps shape the department's planning of present and future deployment of firefighting forces, equipment, and emergency resources.

NFPA 1710 establishes a minimum four-minute response time for all calls for service that involve fire and emergency medical services. The standard requires fire departments to meet the four-minute response time at least 90 percent of the time. In 2003, the Presidio Fire Department reached the four-minute response benchmark 74 percent of the time for fire-related and emergency medical services calls for service generated at the Presidio. This response rate is due greatly to the large response area that is covered by one fire station. Average response times, which take into account travel distance, road conditions, and traffic conditions, to the Baker Beach Apartments area and the PSHS district are 6.3 minutes. These two areas of the Presidio have been historically deficient in the required response times and have been managed using risk management practices. Over the past four years, the increase in population in the Baker Beach Apartments area has resulted in an increase in calls for service.

To provide fire suppression and rescue services to incidents that exceed the capability of the Presidio Fire Department, the department has entered into a mutual aid agreement with the San Francisco Fire Department (SFFD) whereby assistance will be provided by SFFD personnel on an "as available" basis at the request of the Presidio Fire Department (City and County of San Francisco 1994). During the past ten years, there have been only two requests for SFFD assistance in response to fires at Baker Beach Apartments. SFFD fire stations that could be called on to respond to a call at the PSHS district include Station 31 at 12<sup>th</sup> Avenue/Geary Boulevard, Station 14 at 26<sup>th</sup> Avenue/Geary Boulevard, Station 34 at 41<sup>st</sup> Avenue/Geary Boulevard, and Station 10 at Presidio Boulevard/California Street. The Presidio Fire Department makes relatively frequent use of City ambulances to back up its medic units, particularly if patients are transported off the Presidio (personal communication with Bert Carlson, NPS Communications Manager).

### **3.9.1.8 Law Enforcement**

Law enforcement services at the Presidio are provided by the U.S. Park Police (USPP) San Francisco Field Office (SFFO) pursuant to an interagency agreement with the Trust, which reimburses the NPS for its service costs. At present, the USPP has an authorized strength of 83 sworn law enforcement positions, and 33 of these authorized positions are dedicated to the Presidio. USPP law enforcement functions include vehicle patrol, motorcycle patrol, foot patrol, horse-mounted patrol, bicycle and trail bike patrol, search and rescue, emergency medical service support, traffic safety, criminal investigations, narcotics enforcement, dispatch, emergency communications, and administrative support. Emergency calls at the Presidio have an average response time of less than three minutes, while the non-emergency response time is less than ten minutes. Area B of the Presidio is divided into two beats patrolled 24 hours a day.

Each patrol beat typically has two patrol cars with a single officer. Currently there is no police station available 24 hours a day, only a dispatch center that can be called via 911 to report incidents.

To augment the USPP in special or unusual circumstances, the USPP has entered into a mutual aid agreement with the San Francisco Police Department (SFPD) whereby assistance will be provided by SFPD law enforcement personnel at the request of the USPP (City and County of San Francisco 2001). During the past ten years, the USPP has not requested the assistance of the SFPD for police action within the Presidio (personal communication with Bert Carlson, NPS Communications Manager). The closest SFPD police station that could respond to a situation requiring USPP assistance is the Richmond Station located at 461 6<sup>th</sup> Avenue.

Today, most of the building square footage within the PHS district is unoccupied. The main hospital building is entirely vacant and the lack of occupancy has made it impossible to secure the building from vandalism and theft, which has led to a gradual acceleration of deterioration within the building. Based on a USPP Records Section search, the USPP responded to an average of five calls per week related to vagrancy, vandalism, break-ins and other incidents within the district between January 2002 and May 2004 (NPS 2004c).

### 3.9.2 ENVIRONMENTAL CONSEQUENCES

The demand for utilities and services Presidio-wide is assessed on pages 298 to 301 and pages 328 to 352 of the PTMP EIS. The discussion is incorporated here by reference and supplemented by analysis of issues specific to the PHS project alternatives under consideration. A summary of annual utility demands based primarily on demand assumptions by land use from the PTMP EIS is provided in Table 23.

#### 3.9.2.1 Requested No Action Alternative

**Water Supply and Demand** – Water supply would be sufficient for existing and proposed needs under this alternative. Based on water demand estimates developed for the PTMP EIS, the various land uses associated with this alternative would demand an average of approximately 10,000 gpd annually. 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. Upgrades to the existing system would be made as part of routine maintenance or on an as-needed basis.

**Wastewater Treatment and Disposal** – Based on wastewater projections in the PTMP EIS, existing and proposed uses at the PHS district under this alternative would generate 9,000 gpd of wastewater annually. Sewer lines are adequately sized to handle existing and proposed flows. Tenants are required by the Trust to practice water conservation to minimize water usage within the district, which also reduces wastewater generation and flows to the CCSF system.

**Storm Drainage** – The existing storm sewer system has sufficient capacity and is adequate to meet the needs of this alternative. Storm water would continue to be directed to the CCSF combined sewer

system. The Trust would continue to repair or replace damaged piping following routine inspection and maintenance activities.

Table 23. Annual Utility Demands

UTILITY	REQUESTED NO ACTION ALT.	ALT. 1	ALT. 2	ALT. 3	ALT. 4
Water Consumption (gpd)	10,000	71,000	69,000	55,000	43,000
Wastewater Treatment and Disposal (gpd)	9,000	55,000	53,000	40,000	30,000
Solid Waste Generation (tons)					
<i>Construction</i>	0	4,950	6,800	12,000	11,580
<i>Operation (annual)</i>	88 <sup>a</sup>	740 <sup>a</sup>	820	540	450
Natural Gas Usage (thousand therms)	28	164	164	113	148
Electrical Demand (million kWh)	0.49	2.61	1.62	1.24	1.47

Source: Presidio Trust 2002b; California Integrated Waste Management Board 2004.

Notes:

<sup>a</sup> Based on a generation rate of 0.0013 tons/sf/yr for educational use.

gpd = gallons per day.

kWh = kilowatt-hours.

**Solid Waste** – This alternative would reuse a portion of the existing buildings within the district, and no major construction activities are proposed. Therefore, there would be minimal or no impacts on regional landfills due to building demolition, construction, or rehabilitation activities. During operation, this alternative would generate roughly 88 tons of waste per year. Solid waste would be reduced by as much as two-thirds through efficient resource use, recycling and reuse, diverting organic material from waste, and purchasing products composed of recycled materials.<sup>22</sup>

**Gas System** – Based on natural gas use projections within the PTMP EIS, this alternative would consume 28 thousand therms of natural gas annually.<sup>23</sup> Existing services are adequately sized for this alternative at the project site, although some infrastructure (pipelines and meters) may be upgraded to provide for a more reliable system. Any improvement in the existing services to the site would be the responsibility of PG&E. Under the terms and conditions of tenant leases, tenants are required to practice energy conservation to assist the Trust in meeting its energy efficiency goals.

<sup>22</sup> Since the PTMP, the Presidio's diversion rate of 65 percent (2002-2003 average) has exceeded the PTMP goal of at least 50 percent (email correspondence, Debby Dunn, Marketing and Community Relations, Golden Gate Disposal, December 8, 2003).

<sup>23</sup> Based upon a gas index of 0.41 therms/square foot (PTMP EIS, page 348).

**Electrical System** – Under this alternative, based on the projections by land use in the PTMP EIS, up to 0.49 million kilowatt-hours (kWh) of electricity would be consumed at the PHSH district annually. The Trust would rehabilitate old cables and upgrade the system as part of maintenance operations for safety and efficiency. Tenants would be required by the Trust to employ energy conservation practices within the PHSH district to maximize energy efficiency.

**Fire Protection and Emergency Response** – Under this alternative, there would be no new code-compliant construction, further upgrading of existing structures, correction of structural fire deficiencies in vacant buildings (such as the lack of code-compliant fire escapes or sprinkler systems), or additional installation of detection and suppression systems. No increases in Presidio Fire Department staff, equipment, or facilities would be made. Response time for calls for fire and emergency medical services at the site would most likely remain deficient unless mitigated.

**Law Enforcement** – Under this alternative, mothballing of unoccupied buildings would include properly securing them from unwanted entry. However, due to the size and location of Building 1801, lack of regular activities due to partial occupancy of buildings, and difficulties in surveillance monitoring, unwanted intrusion would most likely still occur. Therefore, the buildings' protection from vandals, break-ins and arson cannot be guaranteed, and calls for police service at the current level would most likely continue.

### 3.9.2.2 Alternative 1: PTMP Alternative

**Water Supply and Demand** – The proposed use of the PHSH district under this alternative is taken into account in the PTMP EIS water demand calculations, and therefore projected water supply would be sufficient for expected needs. Using water demand estimates developed for the PTMP EIS, the various land uses associated with this alternative would demand an average of approximately 71,000 gpd annually, an increase of 64,200 gpd over existing conditions. This average demand represents approximately 10 percent of the projected water demand of the Presidio under the PTMP. Water would be fed from either the Trust or the CCSF system.<sup>24</sup> The physical condition and capacity of the feeds from both systems are generally adequate to serve the project; however, some upgrades and new backflow prevention devices, fire laterals, and meters would be required.

As required by PTMP EIS Mitigation Measure UT-1 *Demand Management Best Management Practices*, the alternative would use water efficiently and responsibly. The water system would be designed to maximally conserve water. Water-efficient devices would be installed in all structures, and efficient methods would be used for outdoor irrigation.

**Wastewater Treatment and Disposal** – Wastewater generation was projected in the PTMP EIS by applying a 90-percent factor to the domestic water use estimates (non-irrigation demand). The result was compared to current levels to determine impacts on the City's sanitary sewer system, which treats

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<sup>24</sup> Should CCSF supply all water to the PHSH district, water purchases from the CCSF on a Presidio-wide basis would increase from 108,000 gpd as projected in the PTMP EIS to a maximum of 152,000 gpd (under Alternative 1). The increase is still well below the CCSF estimated daily demand of 1 mgd for the Presidio in the SFPUC Urban Water Management Plan. Increased reliance on the CCSF for potable water would reduce demands on Lobos Creek.

wastewater from the Presidio. Based on wastewater projections in the PTMP EIS, proposed uses at full occupancy in the PHSB district under this alternative would generate 55,000 gpd of wastewater annually. Wastewater generated from the PHSB district would be routed to the CCSF's Oceanside Water Pollution Control Plant, which has sufficient capacity and can absorb wet weather flows better than the Southeast Water Pollution Control Plant.

Existing sewer lines are adequately sized to handle increased flows from development under this alternative. PTMP EIS Mitigation Measure UT-4 *Reduction of On-site Wastewater Generation* acknowledges that water conservation practices required by PTMP EIS Mitigation Measure UT-1 to minimize water usage within the district would reduce wastewater generation and flows to the CCSF system.

**Storm Drainage** – The existing storm sewer system has sufficient capacity and would be generally functional to meet the needs of this alternative. Storm water would continue to be directed to the CCSF combined sewer system (and not to Lobos Creek), and storm drains along Wyman Avenue would be re-routed to the CCSF system (instead of Mountain Lake). Upgrading inlets in key pedestrian areas, limited slip-lining and/or replacement of damaged piping, and new inlets and piping from new parking areas would be required. Infrastructure improvements would be installed prior to new construction to minimize storm water runoff and comply with existing water quality standards and regulatory requirements (PTMP EIS Mitigation Measure UT-6 *Storm Water Drainage System Upgrades*). Continued use of the maintenance/corporation yard at Battery Caulfield would include improvements to the storm water management and sediment control practices at the site. In addition, designs or measures would be implemented district-wide to minimize impervious surfaces in order to reduce storm water runoff volumes and improve water quality, including using on-site vegetation and landscaping as a filtration and retention system to the extent feasible. Grass, sand, and other porous surfaces would be placed around non-porous surfaces such as asphalt to limit storm water flows (PTMP EIS Mitigation Measure UT-7 *Storm Water Reduction*).

During construction activities, best management practices would be used to prevent erosion, surface runoff, and siltation of downstream water bodies (PTMP EIS Mitigation Measure NR-15 *Best Management Practices*).

**Solid Waste** – The impacts of demolition, construction, and rehabilitation activities in the PHSB district on the regional waste stream are analyzed in the PTMP EIS. Based on solid waste estimates developed for the PTMP EIS, building rehabilitation within the PHSB district under this alternative would result in the disposal of up to 4,950 tons of debris. Impacts on regional landfills would be substantially reduced by adaptively reusing all existing buildings (minimizing materials use and eliminating almost all demolition waste) and by recycling waste generated during construction to the maximum extent feasible as required by PTMP EIS Mitigation Measure UT-8 *Waste Diversion*. Waste recycling would include developing and implementing a construction and demolition debris management plan with the aim to divert up to 75 to 80 percent of construction waste from landfills as demonstrated by the Letterman Digital Arts project.