

4.4.1 Consistency with Approved Plans and Policies

4.4.1.1 GENERAL OBJECTIVES OF THE GMPA AND PURPOSES OF GGNRA ACT
Alternative 4 is consistent with the General Objectives of the GMPA, which are identified in Section 1.1.5 of this document. Foremost, it is consistent with the General Objective of sustaining the Presidio indefinitely, both economically and physically, through the development team's organizational and financial capabilities to undertake capital investments, operate programs, and make contributions to help preserve the park's unique historic and natural qualities. This alternative is consistent with meeting the Trust Act's financial self-sufficiency mandate and the requirement that the Trust give priority to tenants that enhance the financial viability of the Presidio.

Removal of both the LAMC and LAIR buildings, modern structures that block view corridors and are architecturally non-distinctive, would be consistent with the GMPA's General Objective to enhance the scenic resources of the Presidio. Removal of LAMC and LAIR is also consistent with the General Objective of enhancing the Presidio's cultural resources by assisting in rehabilitating historic settings to permit an understanding of the site's significance to the National Historic Landmark district. In furtherance of this General Objective, design and siting of new construction would promote the enhancement and rehabilitation of scenic vistas, including views to the Palace of Fine Arts. New construction to replace the monolithic and architecturally non-distinctive buildings with those better tailored to the mass, scale, color, and materials of other structures in the Letterman Complex and the Presidio would be in keeping with preservation of the character and integrity of the National Historic Landmark district. Consistent with the General Objective to provide for uses that involve stewardship and sustainability, replacement construction would promote principles of sustainable design and technology. Furthering this General Objective, hand-dismantling and salvaging of materials prior to building demolition and conservation and recycling strategies to be employed within the buildings and by tenants would promote and demonstrate conservation practices, including waste reduction and recycling.

The alternative is consistent with the General Objective to provide for appropriate uses of the Presidio. Alternative 4's anchor tenant, a media/Internet programming company, and the women's small business hi-tech incubator would be consistent with the GMPA's General Objective to provide uses that involve the arts, education, research, innovation, and communication. These uses would complement park-related programs and activities in the areas of Internet-based research and development and telecommunications (areas which could not have been envisioned during preparation of the GMPA in 1994). In addition, the visitor's center, the international environmental organization and the national foundation supporting national parks, and the museum and cultural center would also be consistent with the General Objective of the GMPA to provide uses that involve stewardship and sustainability, community service and restoration, research, education, and communication. In addition, the international environmental organization and the museum and cultural center would contribute to the additional General Objective of cross-cultural and international cooperation uses. The branch library of the California State library system and the local historical society would similarly be



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consistent with the GMPA's General Objective to provide uses that involve education, research, and communication.

The provision of a substantial live/work component would enhance the Presidio Trust's ability, and therefore be consistent with the General Objective, to increase open space in other parts of the park while sustaining the Presidio economically. The live/work component would also be consistent with the GMPA's General Objective of addressing the needs of Presidio visitors, tenants, and residents. In addition, tenant programs to reduce automobile use and parking demand, as well as the live/work concept of this alternative, would be consistent with the General Objectives of the GMPA of meeting tenant and resident needs while minimizing impacts on neighboring communities.

Alternative 4 is consistent with the purposes of the GGNRA Act, which are identified in Section 1.1.5 of this document. Primarily by focusing more intensive use into an area that has been previously developed, Alternative 4 preserves the recreation area as far as possible in its natural setting. New construction would be subject to sound land use planning, including implementation of the Planning Guidelines and design review, so that it would not degrade scenic views and the natural setting.

4 . 4 . 1 . 2 P R E S I D I O G E N E R A L M A N A G E M E N T P L A N A M E N D M E N T

Alternative 4 is also consistent with a number of the more specific goals and planning principles of the GMPA. This alternative would foster the GMPA's proposed major directions for the future of the Presidio by perpetuating the site as a building and activity core. New construction would replace the LAMC as permitted under the GMPA since the LAMC would not meet essential program and management needs.

In certain respects, Alternative 4 does not match the GMPA's site-specific plan. This alternative would not promote the GMPA concept for infill construction within the complex but would focus replacement construction within a 23-acre site. Because replacement construction would occur within only a portion of the potential sites that were identified on a preliminary basis as referenced in the GMPA (i.e., outside the historic hospital complex), the alternative would not reinforce the historic hospital complex's courtyard as encouraged by the GMPA. Whereas the GMPA assumed the rehabilitation and reuse of LAIR, demolition of the LAIR and other existing buildings that have been demolished or are designated for demolition so as to allow new replacement construction would also increase the total amount of gross square feet of replacement construction within the complex as envisioned in the GMPA from 503,000 to approximately 900,000 square feet. Nevertheless, the GMPA's key restrictions on maximum allowable square footage for the complex (1.3 million square feet) and maximum allowable height of new construction (60 feet) would not be exceeded by this alternative. Furthermore, replacement construction would proceed in accordance with the Planning Guidelines (provided in Appendix B) and design review as recommended within the GMPA to ensure that new construction would be compatible with the adjacent historic buildings and patterns of development.

Alternative 4's uses would complement park-related programs and activities in the areas of Internet-based research and development and telecommunications (areas which could not have been envisioned during preparation of the GMPA in 1994). In addition, the anchor tenant would enliven the park with a program of national and international distinction serving a national and international audience. These users would also advance the GMPA's specific programs to provide research, education, and training in the principles and



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practices of resource stewardship within and beyond park boundaries. And, the international environmental organization and the museum and cultural center would contribute to cross-cultural and international cooperation. The branch library of the California state library system and the local historical society would also promote the GMPA Presidio-wide principles regarding interpretation and education, as well as collection preservation. Together, these tenants would assist in making the Presidio a center for research and learning.

Provision of housing at the site would support the GMPA's specific goal to provide housing for employees of tenant organizations and to create a lively community that contributes to the site. It would also support the GMPA's specific long-term goal of clustering housing opportunities near and within the park's work and major activity centers. Provision of limited retail facilities and services within walking distance of housing would reinforce the GMPA's neighborhood concept. Tenant programs to reduce automobile use and parking demand, as well as the live/work concept of this alternative, would further the GMPA's specific goals of reducing automobile use and making the Presidio an environmental model of sustainable development.

This alternative, however, would not implement the specific proposal in the GMPA for the Letterman Complex to serve as a science and education center devoted to issues of health, life and earth sciences. Since to date no suitable tenant has been identified for the site that would adhere to the GMPA's specific proposal, this potential land use conflict cannot be resolved. However, mitigation measures identified in Section 4.7 would be implemented to lessen adverse impacts of this alternative.

4 . 4 . 1 . 3 S A N F R A N C I S C O G E N E R A L P L A N

While the Presidio is not subject to the General Plan, this alternative would be consistent with the General Plan policies of including housing in business developments. However, it may not be consistent with the policy to restrict business activities of city-wide importance to districts devoted to and designated for business services.

4.4.2 Solid Waste

4 . 4 . 2 . 1 D I S P O S A L O F D E M O L I T I O N D E B R I S O F F S I T E

The impacts of this alternative on solid waste sites located in the Bay Area are similar to those discussed for Alternative 2. Due to the demolition of both the LAMC and LAIR buildings as proposed under this alternative, Alternative 4 would generate 80,000 tons of construction debris. This represents 44,600 (55 percent) more tons of debris than Alternative 1. Appropriate landfill sites are available in the Bay Area, landfill operators have sufficient capacity and are willing to accept the material, and at least 50 percent of the debris would be diverted from the landfills. Thus, Alternative 4 is expected to result in a less-than-significant impact on regional solid waste disposal facilities.

4.4.3 Water Supply and Distribution

4 . 4 . 3 . 1 I M P A C T S O F W A T E R C O N S U M P T I O N O N A V A I L A B L E W A T E R

Alternative 4 would demand approximately 64,000 gpd of water (Tables 12 and 13). This figure assumes the use of 11,781 gpd of gray water captured onsite for a portion of the landscape irrigation. The estimated water



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consumption of this alternative is well below the 89,000 gpd baseline estimate established for the site. Since the estimated water consumption of this alternative is below the threshold for the site, Alternative 4 is not expected to have a negative effect on the Presidio water supply. Nevertheless, the development team should adopt water conservation measures implemented by the Presidio Trust and described in mitigation measure WS-2, *Water Supply- and Demand-Side Solutions to Reduce Cumulative Impacts* to further reduce water consumption.

4 . 4 . 3 . 2 I M P A C T S O N F I R E F L O W S

Improvements to the water distribution system may be required to ensure adequate fire flow to new development with the Letterman Complex to meet the Uniform Fire Code depending on the characteristics of buildings to be constructed (see mitigation measure WS-1, *Fire Flows*).

4.4.4 Schools

4 . 4 . 4 . 1 I M P A C T O N C A P A C I T Y A T E X I S T I N G O R N E W S C H O O L S I T E S

Alternative 4 would generate 273 schoolchildren who would enroll in SFUSD schools (Table 14). The SFUSD Education Placement Center, the office responsible for managing enrollment and placing children within SFUSD schools, stated that these schoolchildren, who are likely to attend schools in the neighborhoods surrounding the Presidio, would not require the SFUSD to develop new capacity within existing or new school sites (personal communication with Margaret Wells, Program Director of the Education Placement Center). Because this level of enrollment is within the existing capacity of SFUSD, Alternative 4 is not expected to result in an adverse impact on SFUSD schools.

4.4.5 Housing

4 . 4 . 5 . 1 I N C R E A S E I N H O U S I N G D E M A N D

At buildout, the additional regional housing demand created by employment associated with Alternative 4 from outside of the Bay Area would be 462 housing units (Table 15). The Presidio housing stock, including the 400 to 450 units to be constructed onsite, would accommodate 100 percent of this housing demand. Since Alternative 4's housing demand generated by new employment from outside the Bay Area can be accommodated at the Presidio, this alternative would not adversely impact the housing market within San Francisco and the surrounding Bay Area.

4.4.6 Medical Research

4 . 4 . 6 . 1 I M P A C T O N M E D I C A L R E S E A R C H

Implementation of this alternative would preclude the use of the site for medical and life science research. The impact of not providing medical research space at the site is described under Alternative 3.



4.4.7 Traffic and Transportation Systems

Under Alternative 4, the existing roadway network within the 23-acre site would be slightly modified, but access points to the site would be similar to those that currently exist. Improvements to the intersection(s) of Lyon Street/Richardson Avenue/Gorgas Avenue would allow for left turns into the site from westbound Richardson Avenue. The Gorgas Avenue Gate would be the primary entrance, with the Lombard Street Gate serving as a secondary entrance. Alternative 4 would also include improvements to the pedestrian and bicycle circulation network within the complex, as well as improved connections to adjacent areas. Alternative 4 assumes a total of 100 above-grade parking spaces and 1,290 underground parking spaces within the site, of which 400 spaces would serve residential areas and 890 spaces would serve office buildings.

4.4.7.1 ADDITIONAL TRAFFIC VOLUMES

Alternative 4 would generate 5,140 external (i.e., to areas outside the Presidio) weekday daily vehicle-trips and 600 vehicle-trips during the p.m. peak hour into and out of the Presidio (Table 16). As offices would be the predominant use at the site, most of the 600 p.m. peak-hour trips would be leaving the site, with 370 outbound trips (primarily employees leaving the office) and 230 inbound trips (primarily residents returning home) (Table D-9 in Appendix D).

Between existing and future year 2010 conditions, the Mason Street Gate would incur an increase of 370 vehicles during the p.m. peak hour, with project-related traffic comprising 16 percent of this increase. Alternative 4 would contribute the majority of the traffic volume increase at the Gorgas Avenue Gate. Traffic volumes at this gate would increase by 600 vehicles during the p.m. peak hour, with project-generated traffic comprising 65 percent of this growth. The existing p.m. peak-hour traffic volumes at the Lombard Street Gate would be increased by 410 vehicles. Fourteen percent of this increase would be due to Alternative 4. The existing p.m. peak-hour traffic volumes at the Presidio Boulevard Gate would increase by 230 vehicles, with project-related traffic comprising 40 percent of this increase (Table 17).

4.4.7.2 IMPACTS ON INTERSECTION OPERATING CONDITIONS

Currently, during the p.m. peak hour, two of the study intersections operate at LOS C, four intersections operate at LOS B and one intersection operates at LOS A (Table 4). Under Alternative 4, three of the study intersections (Presidio Boulevard/Letterman Drive/Lincoln Boulevard, Mason Street/Marina Boulevard/Lyon Street, and Doyle Drive/Marina Boulevard/Lyon Street) would operate acceptably at LOS C during the p.m. peak hour (Table 18). Impacts to nearby intersections would be similar to Alternative 2 (Table 18). The intersections of Lombard Street/Lyon Street and Presidio Boulevard/Lombard Street would fail, operating at LOS F and LOS E, respectively. Recommended improvements as described in mitigation measures TR-2, *Lombard Street/Lyon Street Intersection Improvements*, and TR-3, *Lombard Street/Presidio Boulevard Intersection Improvements*, in Section 4.6.6 and illustrated in Figures 16 and 17 would improve the operating conditions at the intersection of Lombard Street/Lyon Street from LOS F to LOS B and at the intersection of Presidio Boulevard/Lombard Street from LOS E to LOS D.

4.4.7.3 INCREASED PARKING DEMAND

Alternative 4 assumes a parking supply of 1,390 parking spaces. The provision of housing as part of this alternative would partially offset the demand generated by the office uses. The parking demand of 1,160



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parking spaces for Alternative 4 land uses would be less than the proposed supply of 1,390 spaces. Therefore, there would be no significant impact on parking in Area A or adjacent neighborhoods. As shown on Table D-11 in Appendix D, weekend parking demand would be only 57 percent of weekday demand; therefore, substantial parking would be available for recreational uses on weekends.

4.4.7.4 IMPACTS ON PEDESTRIAN AND BICYCLE FACILITIES

Alternative 4 would result in a substantial increase in pedestrian and bicycle activity within and in the vicinity of the Letterman Complex. Alternative 4 would add 270 new pedestrian and bicycle trips during the p.m. peak hour. These new trips would be accommodated within the existing pedestrian and bicycle network. In addition, planned improvements would enhance the pedestrian and bicycle environment.

The impacts associated with improvements at the Lyon Street/Richardson Avenue/Gorgas Avenue intersection (mitigation measure TR-1) on the citywide bicycle network are described under Alternative 1. Relocating a portion of the city's bicycle route 4 as discussed in mitigation measure TR-6 would reestablish this connection.

Implementation of recommended vehicular capacity improvements at the Lombard Gate may require adjustment of routes and physical improvements to facilitate access for bicycles currently entering the Presidio via the city's bike route 4 (relocated to Chestnut Street; see mitigation measure TR-6) and bike route 6 (Greenwich Street). The current Presidio Trails and Bikeways Study will consider alternatives to the current access on Lombard Street to include widening the current pedestrian walkway at the Lombard Gate, re-establishing the historic opening of the Presidio perimeter wall at Greenwich Street (subject to additional environmental review, including Section 106 compliance), relocating bike route 4 to Gorgas Street or creating an expanded bicycle and pedestrian path from the Lombard Street Gate (see Figure 18).

4.4.7.5 INCREASED DEMAND FOR PUBLIC TRANSPORTATION

Alternative 4 would generate 180 p.m. peak hour transit trips on the six existing MUNI bus lines that currently serve the Presidio. Planned improvements to transit service to the Presidio, including a peak period express bus service and more frequent service on MUNI's 29-Sunset line, would also serve to accommodate the increase in transit demand.

The average passenger load on Golden Gate Transit transbay buses during the a.m. and p.m. peak hours is about 30 passengers per bus, and there are about 120 buses per hour during the a.m. peak hour and about 110 buses per hour during the p.m. peak hour for about 23 different transbay routes (Golden Gate Bridge, Highway and Transportation District 1997). Alternative 4 would generate 26 transit trips to the North Bay in the p.m. peak hour. If these project-generated passengers were distributed across the 23 Golden Gate Transit routes proportionally to the existing distribution of passengers across routes, the project would add a maximum of three passengers to each route. Even if all of the passengers added to a single route were on the same bus, the estimated passenger load would not exceed the bus capacity for any one line.

4.4.7.6 IMPACTS OF TRANSPORTATION DEMAND MANAGEMENT MEASURES

In addition to the TDM plan elements described in the GMPA, the following TDM measures would be included as part of Alternative 4 to encourage non-automobile modes and minimize parking demand:



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- Guaranteed-ride-home program
- Car-sharing
- Bicycle-sharing
- Webpage devoted to transportation alternatives
- Flex-time policies
- Telecommuting policies
- Pedestrian and bicyclist amenities such as onsite showers and changing rooms
- Preferential carpool/vanpool parking
- Time limits for short-term parking supply
- Providing monetary incentives to not drive
- Transportation coordinator
- Carpool/vanpool matching
- Vanpool program
- Shuttle to BART and MUNI Metro
- New employee orientations
- Onsite retail
- Subsidize improved MUNI service

These TDM measures would support transit use and discourage single-occupant auto use by office employees by providing incentives for carpooling and not driving (e.g., preferential carpool parking, monetary incentives, and guaranteed-ride-home programs). The car-sharing program would provide employees and residents the flexibility of using transit, bicycling or walking, while having a vehicle available when needed. Telecommuting policies would reduce the number of person-trips traveling to and from the Letterman Complex.

A TDM program, as discussed in mitigation measure TR-8, would be developed that would establish specific performance targets and a monitoring and reporting process.

4.4.7.7 CONSTRUCTION IMPACTS

The impacts associated with additional construction-related traffic on the local and regional traffic network are described under Alternative 1. A construction traffic management plan, as discussed in mitigation measure TR-5, would be developed to provide specific routes and other mitigation measures to minimize traffic impacts.



4.4.8 Cultural Resources

4.4.8.1 EFFECT OF REMOVING LAMC/LAIR AND ADDING NEW CONSTRUCTION
Under this alternative, LAMC and LAIR would be removed and replacement construction of 900,000 square feet would be built. In contrast to the current centralized building layout of LAMC and LAIR, replacement buildings would be lower in height, distributed across the 23 acres, and would complement historic patterns of development found elsewhere around the complex. The Planning Guidelines, finalized under this EIS, and Design Guidelines for new construction would be applied to new construction to achieve a contextual and compatible approach to architecture and site planning within the historic setting. However, replacement construction on the 23-acre site would foreclose the opportunity for the construction of new infill buildings within the adjacent historic hospital complex as recommended in the GMPA. Therefore, this alternative would preclude enhancing the campus-like setting of the historic landscape and unifying the disjointed remnant historic building cluster. This would constitute an adverse effect on the adjacent historic hospital complex.

Building Massing and Scale – With regard to massing and building heights, proposed new construction would follow the height limits outlined in the Planning Guidelines to be compatible with the historic setting. The massing and bulk of the four office buildings (see Figure 7) would be out of scale with and have an adverse effect on adjacent historic structures along O’Reilly Avenue. These buildings would be modified during design review to ensure they would be compatibly designed and sited in keeping with the historic setting following the Planning Guidelines. The new residential buildings are narrow, rectilinear shapes, compatible with the historic fabric of existing building footprints found throughout the Presidio. The primarily three- and four-story buildings with punched openings, ground floor entries, and details such as porches and pitched roofs would be compatible with the setting and in accordance with the Planning Guidelines.

O’Reilly Greensward – This alternative includes a greensward along O’Reilly Avenue that creates a buffer between the new construction and the adjacent historic structures, as recommended by the Planning Guidelines. While this green space is enclosed at its north and south ends, this would not constitute an adverse effect on the structures. Modifications to the siting of these buildings would be considered during design review to open the ends of the greensward as recommended by the Planning Guidelines.

Gorgas – Several mixed-use buildings would be sited along the Gorgas Avenue edge of the 23-acre site and would be consistent with the Planning Guidelines’ recommendation for this edge.

Site Circulation –The pattern of new streets and pedestrian routes within the 23 acres would achieve the overall goals of the Planning Guidelines and connect the site with the adjacent historic hospital complex. Proposed new road connections would provide clear and accessible north/south connections through the site with a direct connection between O’Reilly Avenue and Letterman Drive at the west edge and a new road at the center of the site via Letterman Drive. Indirect east/west routes would provide cross-site movement at Chestnut Street, Torney Avenue and Edie Street. In general, the scale and pattern of proposed new streetscapes would be in keeping with the historic setting and would connect the adjacent historic hospital complex to the 23-acre site.

4.4.8.2 BENEFICIAL EFFECT ON EXTANT CULTURAL LANDSCAPE FEATURES
The effects of the actions described under this alternative would be similar to those under Alternative 2.



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4.4.8.3 ADVERSE EFFECT OF REMOVAL OF TENNIS COURT (STRUCTURE 1147)

The adverse effect of removal and replacement of this structure is discussed under Alternative 2.

4.4.8.4 EFFECT ON THE PRESIDIO WALL

The effect of the proposed re-introduction of a pedestrian entrance through the Presidio wall along Lyon Street at the Chestnut Street intersection is discussed under Alternative 2.

4.4.8.5 EFFECT DUE TO INTERSECTION AND ROADWAY IMPROVEMENTS

The effect due to intersection improvements would be similar to that described in Alternative 2. However, under this alternative, Letterman Drive would not be removed. Torney Avenue would be extended in the eastward direction to provide access into the center of the site. This would not have an adverse effect on the historic setting.

4.4.8.6 VISUAL IMPACTS

This alternative, with the removal of LAMC and LAIR, the large paved parking area that occupies the eastern half of the 23-acre site, and the introduction of lower-scaled new construction would enhance the visual integrity of the Letterman Complex. The removal of the 10-story LAMC building, and replacement with new construction limited to 60 feet in height, would substantially improve the views from many vantage points within the Presidio. A central landscaped open space would provide views of the Palace of Fine Arts, which would enhance the scenic qualities of the 23-acre site (refer to Figure 23). Views into the 23-acre site from Lyon Street would be screened by the existing windrow.

The siting of buildings near Lombard Street Gate would alter the visual setting at this important entry point. New construction would reinforce the historic pattern of development for the Letterman Complex, which included buildings very close to the Lombard Street Gate. Sufficient vegetative screening and building setbacks would be provided to minimize these impacts on entry views. The buildings would also be staggered to allow for additional vegetative screening. Views from Lombard Street Gate toward the 23-acre site would produce a new sense of arrival into the Presidio similar to the historic pattern of buildings at this edge.

This alternative would enhance north-facing views into the center of the site and to the Palace of Fine Arts from its southern edge. In addition, the historic view corridor at Torney Avenue would be opened up, which would enhance the visual continuity of the site with the adjacent historic hospital complex. However, the existing historic view corridors at Thornburg and Edie roads would not be maintained, which would have a negative effect on the visual quality of the complex. Modifications would be made during design review to improve viewing opportunities along this corridor.

4.4.8.7 BENEFICIAL EFFECT ON VISITOR EXPERIENCE

This alternative would have a beneficial impact on the visitor experience. A central public green park area would provide opportunities for informal and planned public activities. A new pavilion at the green would be used for programs such as dance, drama, and musical performances. The market hall would provide a public gathering place. Education programs on conservation, sustainability, Internet technology, and environmental themes would be offered for the Presidio community and visitors. A branch library on history and genealogy, in conjunction with museum and cultural center activities, would provide new visitor opportunities.



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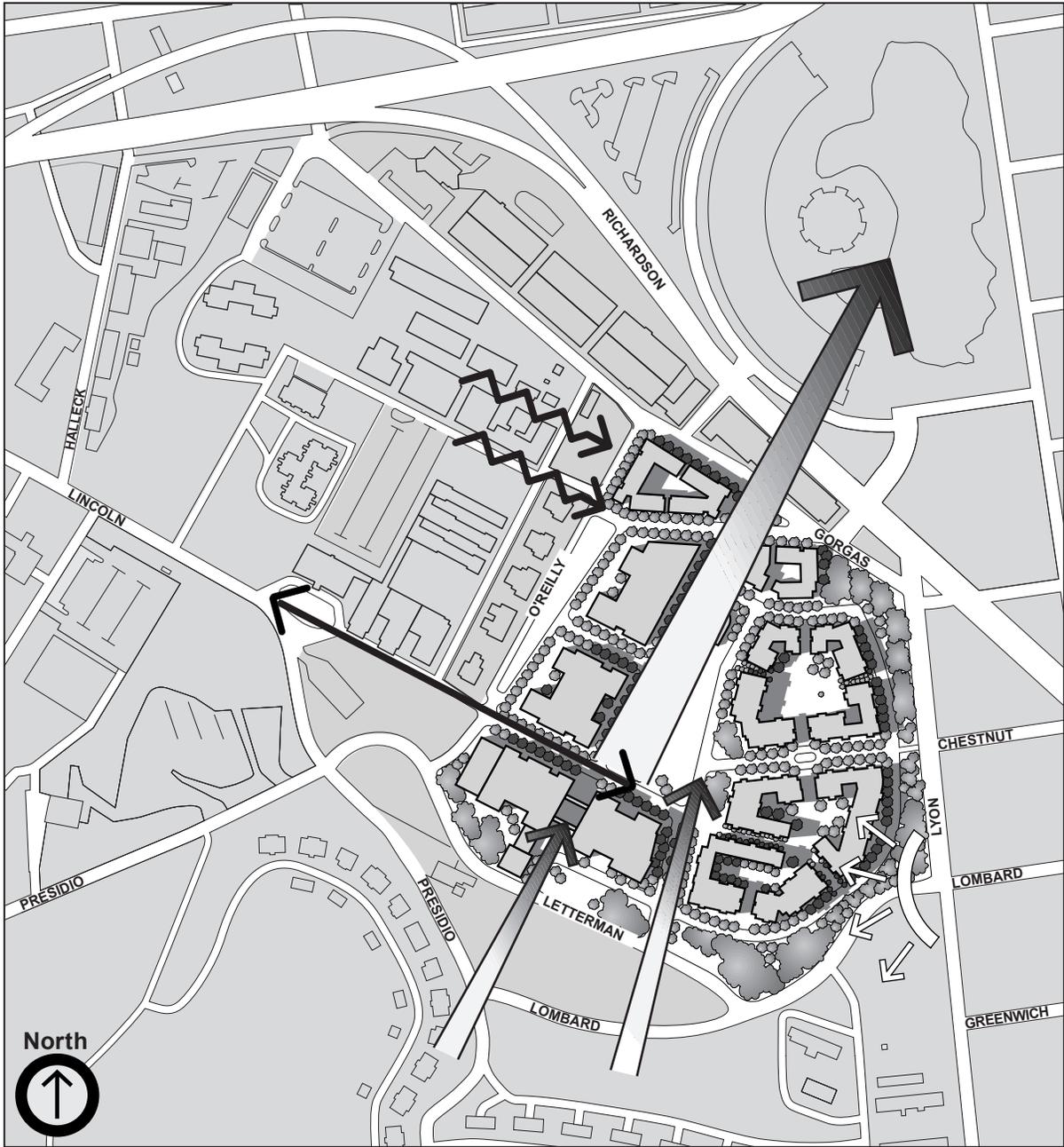
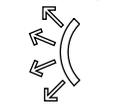


Figure 23.
Visual Impacts of
Alternative 4

-  Key Scenic Views and View Corridors
-  Historic View Corridors
-  Obstructed Views
-  Views from Entry Point



The 23-acre site, as an integral part of the Letterman Complex, would be one of many areas throughout the Presidio which would “tell the story” of the Presidio in support of the five interpretive themes identified in the GMPA. Other beneficial actions would include the introduction of information/orientation kiosks, public lobby spaces with interpretive information about the complex, and interpretive displays incorporated into the landscape at key spots. These improvements would increase public access and visitor opportunities considerably over what exists today for visitors.

4.4.8.8 EFFECT ON ARCHEOLOGICAL PROPERTIES

As discussed in Alternative 2, ground-disturbing activities would have the likelihood of encountering archeological resources. An Archeological Management Assessment and Monitoring Program (described in Appendix F) would be employed to discover, document, protect, and manage the archeological record at the Letterman Complex. As a result of these practices, an adverse effect on archeological properties would be avoided.

4.4.9 Air Quality

4.4.9.1 SHORT-TERM DEMOLITION/CONSTRUCTION IMPACTS

The impacts during demolition of buildings and replacement construction at the 23-acre site would be similar to those shown under Alternative 2. Compliance with the applicable requirements for asbestos control and incorporation of mitigation measures AQ-1, *BAAQMD Control Measures*, and AQ-2, *Demolition of Existing Buildings* into the alternative would reduce the effects of demolition and construction activities to a less than significant level.

4.4.9.2 LONG-TERM REGIONAL OPERATION IMPACTS

Alternative 4 would result in an increase of up to approximately 6,450 internal and external vehicle trips per day. Based on URBEMIS7G modeling results, increased vehicle trips associated with the alternative would generate approximately 55 lb/day of ROG, 90 lb/day of NO_x, 39 lb/day of PM₁₀, and 671 lb/day of CO. These emission rates are summarized in Table 22. Alternative 4 would result in regional operational emissions exceeding the BAAQMD’s significance thresholds for NO_x. Implementation of TDM measures identified in the Traffic and Transportation Systems section would encourage alternatives to automobile use, contribute to improvements in air quality and lower NO_x emissions.

Similar to the impacts under Alternative 1, direct and indirect emissions from the use of electricity and natural gas due to Alternative 4 would not be significant when compared to the emissions caused by project-related traffic, and the alternative would not have the potential to expose nearby receptors to toxic air contaminants.

4.4.9.3 LONG-TERM LOCAL OPERATIONS IMPACTS

Localized CO impacts due to project traffic are described under Alternative 1. Because Alternative 4 2010 traffic would result in fewer than 1,680 vehicles in the p.m. peak hour through the Lombard Street Gate, the localized CO concentrations for Alternative 4 would be less than 7.9 ppm on a 1-hour basis and less than 5.4 ppm on an 8-hour basis. These localized CO concentrations would not exceed the state ambient air quality standards for CO.



4.4.10 Noise

4.4.10.1 SHORT-TERM DEMOLITION/CONSTRUCTION NOISE IMPACTS

The impacts during demolition and construction of the Letterman Complex would be similar to those described under Alternative 2.

4.4.10.2 LONG-TERM TRAFFIC NOISE INCREASES

The impacts of traffic noise caused by Alternative 4 would be similar to those described under Alternative 1. Traffic volumes for Alternative 4, including peak traffic volumes for Gorgas Avenue, would be approximately 11 percent above those shown for Alternative 1. The resulting traffic noise levels would be approximately 0.5 dB greater than those shown in Alternative 1. This means that traffic noise levels along Gorgas Avenue would be approximately 71 dBA within 25 feet of the centerline and less than 68 dBA beyond 50 feet. As with Alternative 1, users of the new open space in the Letterman Complex would not be considered to be sensitive receptors, and the noise levels would be compatible with the proposed uses. New housing uses within the Letterman Complex proposed with Alternative 4 would be sensitive receptors, but would be designed with sufficient noise insulation equivalent to that which would comply with Title 24. As such, the traffic noise increases associated with Alternative 4 would not cause a significant impact.

4.4.10.3 LONG-TERM STATIONARY SOURCE NOISE IMPACTS

The impacts of stationary sources of noise associated with Alternative 4 would be similar to those shown under Alternative 1. No significant long-term stationary source noise impacts are expected.

4.4.11 Cumulative Impacts

4.4.11.1 SOLID WASTE

Cumulative impacts due to the disposal of demolition debris under this alternative would be the same as Alternative 2.

4.4.11.2 WATER SUPPLY

The Lobos Creek watershed would be insufficient to supply the in-stream flow requirement necessary to maintain natural streambed characteristics and meet peak Presidio daily demands of 1.66 mgd with this alternative and the other projects listed in Table 9 that are within the Presidio (BAE 1998a). Alternative 4 and the other identified projects within the Presidio would contribute to a net cumulative peak shortfall of approximately 265,000 gpd on the Presidio-wide water supply due to excess demand (BAE 2000). However, water supply- and demand-side measures and instream flow monitoring described in mitigation measures WS-2, *Water Supply- and Demand-Side Solutions to Reduce Cumulative Impacts*, WS-3, *Instream Flow Monitoring to Reduce Cumulative Impacts*, and WT-1, *Water Reclamation Plant to Reduce Cumulative Impacts*, would result in a water savings of approximately 320,000 gpd which would minimize cumulative impacts on the system and baseline stream flow maintained in Lobos Creek.

Projects within the surrounding area would increase water consumption, but according to the city, not in excess of amounts expected and provided for in this area. In general, the projects represent replacement or renovation of existing facilities previously served by the city. New construction would be subject to current city of San



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Francisco water conservation code requirements. Should the Presidio Trust enter into a water purchase agreement with the city to ensure adequate water supplies during peak demand periods, there would be no significant impact on regional water demand since the pending purchase agreement would essentially replace previous agreements held by both the U.S. Army and NPS with the city.

4 . 4 . 1 1 . 3 S C H O O L S

New housing units associated with this alternative are expected to contribute to a cumulative reduction of excess capacity in schools neighboring the Presidio. However, this impact is considered less than significant because SFUSD would be reimbursed through Impact Aid Program payments for pupils living at the Presidio. The increased intensity of residential use of the 1880 Lombard Street residential building would not be of a magnitude that would result in a significant increase in school enrollment.

4 . 4 . 1 1 . 4 H O U S I N G

This alternative and the other project listed in Table 9 would add 3,661 employees to the local economy. The new development within the 23-acre site accounts for 2,400 jobs, or 66 percent of this total. This growth in employment is estimated to require 705 new housing units (BAE 2000). The alternative proposes to add 450 housing units at the Letterman Complex. The listed projects include the provision of 1,331 new housing units (1,304 renovated units on the Presidio and 27 new units in the Marina District.) The housing demand resulting from the projects would be more than offset by the housing units added to the local supply, largely by reactivation of housing at the Presidio. Therefore, cumulative demand under this alternative would not contribute to employment-related housing demand increases in the surrounding neighborhood or city.

4 . 4 . 1 1 . 5 T R A F F I C A N D T R A N S P O R T A T I O N S Y S T E M S

The traffic generated by the Alternative 4 land uses would contribute to the expected increases in cumulative traffic volumes on adjacent local and regional roadways. Alternative 4 would make up 32 percent of the total p.m. peak-hour traffic resulting from these cumulative projects, representing a greater contribution than other alternatives (Table 19). The combined cumulative projects, including Alternative 4, would generate increased traffic volumes throughout the Presidio. The cumulative projects would contribute 350 additional vehicles on Lincoln Boulevard during the p.m. peak hour, and Alternative 4 would make up about 18 percent of the additional traffic. Similar to Alternative 2, the cumulative increase in traffic would cause significant impacts at two of the study intersections. However, mitigation measures TR-2, *Lombard Street/Lyon Street Intersection Improvements*, and TR-3, *Lombard Street/Presidio Boulevard Intersection Improvements*, would improve the LOS at these intersections to acceptable levels (LOS D or better), as shown in Table 20.

The parking demand generated by the cumulative projects, including Alternative 4, is estimated to be 4,262 spaces, or about 40 spaces more than Alternative 2. Alternative 4 would comprise about 32 percent of the total cumulative parking demand within the Presidio and 27 percent of the total cumulative parking demand within the project impact zone (Table 21). The proposed parking supply within the 23-acre site in Alternative 4 would exceed the projected parking demand, as discussed in Section 4.4.7.3. The 8,390 parking spaces to be provided within the Presidio (as described in the 1994 GMPA) would be adequate for the expected cumulative parking demand within the Presidio. The parking impacts outside of the Presidio would be comparable to those described in Alternative 2.



4 . 4 E N V I R O N M E N T A L C O N S E Q U E N C E S : A L T E R N A T I V E 4
(L I V E / W O R K V I L L A G E)

The alternative's contribution to cumulative growth would have a minor cumulative effect on local and regional traffic growth and related congestion, and would be similar to Alternative 2.

4 . 4 . 1 1 . 6 C U L T U R A L R E S O U R C E S

Under this alternative, LAMC and LAIR would be removed and replacement construction of 900,000 square feet would be built. In contrast to the current centralized building layout of LAMC and LAIR, replacement buildings would be lower in height, distributed across the 23 acres, and would complement historic patterns of development found elsewhere around the complex. The Planning Guidelines, finalized under this EIS, and Design Guidelines for new construction would be applied to new construction to achieve a contextual and compatible approach to architecture and site planning within the historic setting. However, replacement construction on the 23-acre site would not allow for the construction of new infill buildings within the adjacent historic hospital complex as recommended in the GMPA. Therefore, this alternative would not contribute to cumulative beneficial effects on the National Historic Landmark district.

4 . 4 . 1 1 . 7 A I R Q U A L I T Y

Proposed development under Alternative 4 and the projects identified in Table 9 would contribute to a cumulative increase in vehicle trips on the region's roadways and would contribute to cumulative increases in regional emissions. The cumulative operational emissions would cause localized impacts at congested intersections in the vicinity of the projects, but the resulting impacts would not be expected to cause local violations of ambient air quality standards. Expected cumulative increases in vehicle trips would also result in increases to region-wide emissions of ozone precursors (including NO_x and ROGs) and CO. With the exception of NO_x, the proposed development would cause emissions of ozone precursors that fall below the thresholds set forth in federal regulations for conformity determinations (as shown in Table 22). Because emissions of ozone precursors would be less than the applicability thresholds, a conformity determination is not necessary for ozone. Emissions of CO that would be caused by the cumulative scenario under Alternative 4 are accounted for in the current maintenance plan for CO, as discussed in Section 5.4.2. Because the projects are in conformance with regional air quality plans, no further conformity analysis is necessary, and no significant cumulative impacts would occur.

4 . 4 . 1 1 . 8 N O I S E

Demolition and construction activities under Alternative 4, in combination with the project to reconstruct Doyle Drive, would cause short-term cumulative noise impacts if the two projects were to be under construction at the same time. Long-term cumulative impacts around the Letterman Complex would primarily result from increased traffic on Doyle Drive (U.S. Highway 101). The long-term cumulative effect of Alternative 4 and other projects within the Presidio and nearby portions of San Francisco would be increased traffic noise on most of the roads internal and external to the Presidio.

Because the surroundings are dominated by traffic noise in the existing conditions, approximately two-fold increases in traffic would have to result from cumulative development in order to cause increases in traffic noise that would be noticeable to most people. Cumulative development with Alternative 4 would cause peak-hour traffic increases along Lombard Street, inside the Presidio, that could result in noticeable noise increases, but no noise sensitive receptors are located along this segment. None of the roadway segments near noise sensitive receptors would experience greater than two-fold peak-hour traffic increases. The conclusion in the GMPA



Final EIS that long-term cumulative traffic-induced noise levels would increase due to increases in vehicle volumes remains applicable; however, the increases near sensitive receptors would not be considered significant. No significant cumulative noise impacts are expected.

4.4.12 Unavoidable Adverse Effects

The following impacts are identified as potentially significant and for which there are no mitigating measures or would not be mitigated to a level of insignificance.

Cultural Resources – To the extent new construction would not conform to the Planning Guideline recommendations, the following departures would have a potential adverse effect on cultural resources.

- Removal of LAMC and LAIR and replacement construction consistent with Planning and Design Guidelines would not allow for infill construction as recommended in the GMPA, which would have an adverse effect on the adjacent historic hospital complex.
- Removal of two historic tennis courts would have an adverse effect on these historic structures.
- Massing and bulk of the four office buildings on the western edge of the site would not be in scale with the adjacent historic structures, resulting in a potential adverse effect on the historic setting.
- Historic view corridors at Thornburg and Edie roads would be blocked by the proposed building layout resulting in an adverse visual impact.

Air Quality – The air quality modeling indicated that the level of NO_x emissions would be significant based on the BAAQMD's significance thresholds for NO_x of 80 pounds/day.

Noise – Short-term use of impact tools and demolition activities would be a source of increased noise to occupants and passive recreational users within the Letterman Complex. Mitigation measures proposed to reduce intrusions would reduce noise impacts but not to a level of insignificance to those users closest to (i.e., within 250 feet from) construction equipment.

4.4.13 Relationship of Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity

Use of the site for offices, residences, retail and other uses would preclude other long-term management possibilities for the Letterman Complex. These uses would occur within an intensively used area within the northern part of the Presidio, which would allow areas in the south and along the coast to remain more natural and experience less activity and development. Reinforcement of this overall use pattern would minimize impacts on the productivity of park resources.

Use of the site for offices, residences, retail and other uses would not affect any park ecosystem. Improvements to existing infrastructure would be considered sustainable actions that are expected to improve the operation of systems. Through implementation of the Planning Guidelines for new development, the Presidio Trust would



promote environmental protection and sustainable design and encourage technologies and practices that would reduce environmental impacts or produce environmental benefits in water conservation and reclamation, energy conservation, and transportation.

4.4.14 Irreversible or Irrecoverable Commitments of Resources

The offices, residences, retail and other uses would be designed and constructed to minimize consumption of energy and development of non-renewable fuels. Renewable sources of energy and new developments in energy-efficient technology, including recycling of materials and waste, would be fully explored and implemented to the extent possible. Although new development could be restored to previous conditions over time, the use of land, construction materials, energy, and financial resources to implement the alternative would, in a practical sense, be an irretrievable commitment of resources.

Archeological resources would be avoided where possible and historic resources would be protected. Where this is not possible, disturbance would be mitigated through recovery of cultural information and significant artifacts.

