

Table 18. Predicted Localized Carbon Monoxide (CO) Concentrations at Congested Intersections

	REQUESTED NO ACTION ALT.	ALT. 1	ALT. 2	ALT. 3	ALT. 4	ALT. 1 W/ VARIANT	ALT. 2 W/ VARIANT	ALT. 3 W/ VARIANT	ALT. 4 W/ VARIANT
1-Hour Average (ppm)									
Lake Street / 14 th Avenue	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Lake Street / Park Presidio Boulevard	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
California Street / 15 th Avenue	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
California Street / 14 th Avenue	3.9	3.9	3.9	3.9	3.9	4.0	3.9	3.9	3.9
California Street / Park Presidio Boulevard	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
8-Hour Average (ppm)									
Lake Street / 14 th Avenue	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Lake Street / Park Presidio Boulevard	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
California Street / 15 th Avenue	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
California Street / 14 th Avenue	2.6	2.6	2.6	2.6	2.6	2.7	2.6	2.6	2.6
California Street / Park Presidio Boulevard	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4

Source: Aspen Environmental Group 2004.

Notes:

The California ambient air quality standards are 20 ppm (1-hour) and 9 ppm (8-hour). The national standards are 35 ppm (1-hour) and 9 ppm (8-hour).

Concentrations are based on CALINE4 outputs that are adjusted with future anticipated background CO concentrations of 3.5 ppm (1-hour) and 2.3 ppm (8-hour).

ppm = parts per million.

data demonstrates that CO concentrations have recently been well below the applicable standards, the potential for localized increases in CO concentrations from increased traffic warrants investigation. Use of the Caltrans-approved CALINE4 dispersion model and guidance from the BAAQMD (BAAQMD 1999) allows a comparison of CO concentrations with the applicable ambient air quality standards. Table 19 shows that traffic (with this alternative and Alternatives 2, 3, and 4, including the possible Park Presidio Boulevard Access Variant) would not be likely to cause a violation of the CO standards.

Table 19. Estimated Average Weekday Emissions from Vehicle Trips and Area Sources

	REQUESTED NO ACTION ALT.	ALT. 1	ALT. 2	ALT. 3	ALT. 4
Average Weekday Vehicle Trips	1,501	4,485	2,212	1,600	1,346
Reactive Organic Gases (ROG) (lb/day)	5.50	27.14	26.87	18.34	19.69
Nitrogen Oxides (NO _x) (lb/day)	5.70	17.47	9.46	6.81	6.32
Carbon Monoxide (CO) (lb/day)	59.92	178.84	89.22	64.81	55.17
Sulfur Dioxide (SO ₂) (lb/day)	0.09	0.27	0.13	0.09	0.08
Particulate Matter (PM ₁₀) (lb/day)	12.81	38.30	17.79	12.88	10.95

Source: Aspen Environmental Group 2004.

Notes:

Based on BAAQMD recommendations for compliance with the California Environmental Quality Act (CEQA), a significant impact would occur if operation-related emissions equal or exceed 80 pounds per day (lb/day) of ROG, NO_x, or PM₁₀.

Emission estimates are based on use of the CARB URBEMIS2002 model for each alternative.

Emissions that would be caused throughout the region by new motor vehicle trips and increased consumption of natural gas and other energy have been estimated using the URBEMIS2002 emission model developed by the CARB; the results are shown in Table 18. Mobile source emission estimates reflect the implementation of the Trust TDM program, which would minimize the activity of mobile sources (PTMP EIS Mitigation Measure NR-21).

The central boiler system and tenant activities at Building 1802 could remain in service under this alternative. The area source estimates provided by URBEMIS2002 account for the emissions that could be associated with any foreseeable small new stationary sources (e.g., steam-generating boilers) that may be necessary to provide basic utilities, even though none has been specifically proposed (for this alternative or Alternatives 2, 3, or 4). Any new sources for heating or steam generation would likely be small enough to be exempt from BAAQMD permitting requirements, and no notable sources of air toxics or odors would occur. For projects subject to the California Environmental Quality Act (CEQA), the BAAQMD recommends a threshold of significance of 80 pounds per day for ROG, NO_x, and PM₁₀.

Because emissions from mobile and area sources would not exceed these thresholds, these emissions would not be significant in the regional context.

3.5.2.3 Alternative 2: Infill Alternative

Approximately 48,000 sf of infill development would be built and 48,000 sf of building area would be demolished with this alternative. Demolition and ground-disturbing activities associated with rehabilitation and construction would cause short-term emissions of construction dust and equipment exhaust that would be greater than in Alternative 1. Basic control measures and demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on local and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those identified for Alternative 1 because Alternative 2 would generate less traffic. The majority of the motor vehicle emissions from traffic under Alternative 2 would be caused by the residential components of this alternative. The TDM program (PTMP EIS Mitigation Measure NR-21) would reduce these emissions further.

3.5.2.4 Alternative 3: No Infill Alternative

Emissions of construction dust and equipment exhaust would be greater than in Alternative 1 due to demolition of approximately 125,000 sf of building area on the lower plateau, but construction emissions would be somewhat less than in Alternative 2 because no infill development would occur. Basic control measures and measures for demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on local and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those identified for Alternatives 1 and 2, and the TDM program would reduce these emissions further.

3.5.2.5 Alternative 4: Battery Caulfield Alternative

Emissions of construction dust and equipment exhaust would be greater than in Alternative 1 because of demolition of approximately 116,000 sf of structures on the lower plateau and 73,000 sf of new construction, including 56,000 sf within Battery Caulfield. The larger amount of infill development and demolished area would cause higher construction emissions than expected with other alternatives. Basic control measures for demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on local and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those identified for Alternatives 1, 2, and 3, and the TDM program would reduce these emissions further.

3.5.2.6 Park Presidio Boulevard Access Variant

As shown in Table 19, implementation of the Park Presidio Boulevard Access Variant would have a negligible effect on localized CO concentrations. Construction activities would cause short-term

emissions of dust and equipment exhaust that would be reduced through implementation of basic control measures.

3.5.2.7 Cumulative Effects and General Conformity

Localized CO concentrations (shown in Table 18) are based on traffic volumes that include project traffic with background traffic, which is projected to increase over time. In this way, Table 18 takes into consideration cumulative effects on local air quality. Air quality impacts from motor vehicle emissions and other operating-phase emissions (shown in Table 19) would contribute to ongoing violations of federal or state ambient air quality standards for ozone and PM₁₀ in the region. To minimize the cumulative effects of these impacts, the Trust would ensure that the alternatives would be consistent with the regional CAP by requiring implementation of the TDM program (PTMP EIS Mitigation Measure NR-21). Additionally, any new stationary sources associated with the alternatives would either be exempt or subject to BAAQMD permitting regulations and requirements, which would ensure consistency of those emissions with the SIP and CAP.

Short-term emissions from construction activities could cause cumulative air quality effects if other nearby projects were to be under construction at the same time. In the vicinity of the PHSB district, there are existing landfill sites that are environmentally contaminated and require cleanup. The remediation work may occur simultaneously with demolition or construction phases of the PHSB alternatives. Basic control measures that would be part of the project implementation would also be part of other nearby projects at the Presidio.

The proposed alternatives would not disrupt goals of attainment. Implementation of the TDM program would ensure consistency with the CAP, and conformity with the SIP would be ensured because the relatively small scale of the proposed demolition and construction activities (a maximum of 73,000 sf of new construction for any alternative) would not create emissions in excess of the 100-ton-per-year threshold of the general conformity rule (40 CFR 51.853).

3.5.3 MITIGATION MEASURES

The following measures are derived from the PTMP EIS and will eliminate the potential for significant impacts related to the proposed action and its contribution to cumulative traffic congestion. These measures were adopted as conditions of approval at the end of the PTMP planning and environmental review process and will be implemented for all alternatives.

NR-20 *Basic Control Measures* –To reduce construction-generated particulate matter (PM₁₀) emissions, construction contractors will implement as appropriate the BAAQMD’s recommended control measures for emissions of dust during construction. Basic control measures are as follows: (1) water all active construction areas at least twice daily; (2) cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard; (3) pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas; (4) sweep daily

(with water sweepers) all paved access roads, parking areas, and staging areas; and (5) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

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

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

3.6 Noise

3.6.1 AFFECTED ENVIRONMENT

Noise-related characteristics of the Presidio under the PTMP land use plan are described on pages 127 to 130 of the PTMP EIS. The description is incorporated here by reference, and portions relevant to the PHSB district are summarized below and expanded upon as necessary.

Community noise can be expressed with the following terminology, introduced in the PTMP EIS (pages 127 to 129). The A-weighted decibel scale (dBA) characterizes the pitch and loudness, as perceived by humans. The equivalent energy indicator, L_{eq} , is an average of noise over a stated time period, usually one hour. The day-night average, L_{dn} , is a 24-hour average, which accounts for the greater sensitivity of most people to nighttime noise. The sound level that is exceeded ten percent of the time is known as L_{10} . If the L_{eq} is similar for two locations, a higher L_{10} indicates a wider fluctuation of noise levels and a lower L_{10} indicates steadier noise levels. Generally, a 3-dB difference in community noise is noticeable to most people, a 5-dB difference may cause a change in community reaction, and a difference of 10-dB is perceived as a doubling of loudness.

3.6.1.1 Noise Control Regulations and Programs

The Federal Highway Administration (FHWA) regulations (23 CFR 772) establish Noise Abatement Criteria (NAC), which aim to protect noise-sensitive land uses from highway noise. The FHWA procedures state that noise impacts from traffic are serious enough to warrant consideration of abatement when noise levels for a project approach or exceed the NAC or when they substantially exceed existing noise levels. The NAC are shown in Table 20.

Table 20. FHWA Noise Abatement Criteria (Hourly dBA)

	ACTIVITY CATEGORY	$L_{EQ}(H)$	$L_{10}(H)$
A	Lands on which serenity and quiet are of extraordinary significance and serve as important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	60 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (Exterior)	70 (Exterior)
C	Developed lands, properties, or activities not included in Categories A or B above.	72 (Exterior)	75 (Exterior)
D	Undeveloped lands.	None Applicable	None Applicable
E	Residences, motels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (Interior)	55 (Interior)

Source: 23 Code of Federal Regulations, Part 772, Table 1.

Notes:

Either L_{eq} or L_{10} (but not both) may be used on a project.

dBA = A-weighted decibel scale

$L_{EQ}(H)$ = equivalent energy indicator; average noise over one hour.

$L_{10}(H)$ = sound level exceeded 10% of the time over one hour.

The San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code, 1994) contains the local noise control regulations that apply to the urban neighborhoods surrounding the Presidio. The noise ordinance regulates construction noise, fixed-source noise, and unnecessary, excessive, or offensive noise disturbances within the city. Sections 2907 and 2908 of the San Francisco Police Code provide that:

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

To protect new multi-family residential units associated with development alternatives (including apartments, long-term care facilities, and other attached dwellings) from unacceptable exterior noise environments (PTMP EIS, page 128), the Trust would enforce noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) with building permit conditions.

3.6.1.2 Existing Noise Conditions

The existing noise environment of the PHSH district is characterized by existing traffic, most notably on Park Presidio Boulevard, and natural noise sources. The PHSH district is generally quieter than the surrounding urban environment, although there is a moderate level of human activity due to the current uses, including use of the parking lots.

Existing daytime noise levels in the areas surrounding the PHSH district are in the range of approximately 52 to 62 dBA L_{eq} , depending on the receptor's proximity to traffic. In the neighborhood immediately adjacent to the PHSH district, the exterior noise levels at the residences nearest to the Presidio gates are about 58 dBA L_{eq} . At the 14th Avenue Gate, the exterior noise is a steady background noise caused by traffic on Park Presidio Boulevard, while at the 15th Avenue Gate it is a fluctuating noise caused by traffic periodically passing through the gate.

At each of the monitoring locations examined for this analysis, traffic noise dominates the existing daytime noise environment. Away from traffic noise and noise from other human activity, the natural environment provides noise levels commonly below 60 dBA. All noise levels within the PHSH district are below the 67-dBA NAC threshold for recreation areas, residences, schools, and hospitals. Noise levels at the measurement location closest to the Nike Swale wetland area (near Building 1818) are also below the more restrictive 57-dBA NAC for areas where serenity and quiet are of extraordinary significance. The results of the noise monitoring program for daytime noise levels are summarized in Table 21.

3.6.1.3 Noise-Sensitive Areas

Examples of noise-sensitive areas that need to be protected include residences, schools, day care centers, parks, hospitals, convalescent centers, and recreational facilities. Existing and planned noise-sensitive uses include the existing Lone Mountain Children's Center (in Building 1806); residences within the City of San Francisco (especially along 14th and 15th Avenues) and at the Presidio, including housing associated with the development alternatives; tranquil historic monuments (such as the proposed improvements to the former Marine Hospital Cemetery below the Nike Swale); and natural settings (such as the Nike Swale, Quail Commons, Lobos Creek and Mountain Lake areas).

Table 21. Summary of Short-Term Noise Measurements, PHSH District

SITE	DESCRIPTION	TIME	DOMINATING NOISE SOURCE	HOURLY L_{Eq} (dBA)	L_{10} (dBA)
R1	Wyman Avenue Housing at Building 1811	7:30 AM	Park Presidio Traffic	60.2	62
R2	15 th Avenue Gate	7:55 AM	15 th Avenue Traffic	57.8	62
R3	Battery Caulfield at Building 1451	8:25 AM	Battery Caulfield Road Traffic	61.4	66

Table 21. Summary of Short-Term Noise Measurements, PHSH District

SITE	DESCRIPTION	TIME	DOMINATING NOISE SOURCE	HOURLY L _{EQ} (dBA)	L ₁₀ (dBA)
R4	Upper Plateau at Building 1818	9:10 AM	Battery Caulfield Road Traffic	53.6	56
R5	14 th Avenue Gate (closed to traffic)	9:45 AM	Park Presidio Traffic	58.0	60
R10 (*)	PHSH District, Wyman Avenue at Building 1810	9:05 AM	Park Presidio Traffic	59.6	61

Source: Aspen Environmental Group 2003; except (*) from 2001, as shown in Table 8, PTMP EIS.

Notes:

Tests were duration of 15 to 30 minutes, taken on November 19, 2003.

dBA = A-weighted decibel scale

L_{EQ} = equivalent energy indicator; average noise over one hour.

L₁₀ = sound level exceeded 10% of the time.

3.6.2 ENVIRONMENTAL CONSEQUENCES

Noise effects of the PTMP and plan alternatives are assessed on pages 260 to 268 of the PTMP EIS. This assessment is incorporated here by reference. The PTMP EIS analysis is supplemented here by analysis of the issues specific to the alternatives being considered for the PHSH project.

3.6.2.1 Requested No Action Alternative

Under this alternative, essentially no demolition or replacement construction would occur and the only sources of noise would be similar to those that currently exist (as described in Section 3.6.1.2 above). Minor amounts of traffic noise would continue, especially at the 15th Avenue Gate, the sole access for traffic outside the Presidio. Stationary sources would be limited to the existing boiler system and tenant operations. Except for traffic, which would continue to be focused at the 15th Avenue Gate, no notable source of noise would occur with the Requested No Action Alternative. Because it would not generate a high level of employment or sizeable adult and school-age residential population, the Requested No Action Alternative would not be likely to cause noise impacts during evenings and weekends. The noise levels shown in Table 22 indicate that residences in the adjacent city neighborhood would not experience significant traffic noise impacts.

Table 22. Traffic Noise Levels in the Vicinity of PHSH Gates by Alternative

LOCATION	REQUESTED NO ACTION ALT. (dBA)	ALT. 1 (dBA)	ALT. 2 (dBA)	ALT. 3 (dBA)	ALT. 4 (dBA)	ALT. 1 W/ VARIANT (dBA)	ALT. 2 W/ VARIANT (dBA)	ALT. 3 W/ VARIANT (dBA)	ALT. 4 W/ VARIANT (dBA)
14 th Ave. Gate	60.0	64.0	63.4	63.2	63.1	63.8	63.0	62.9	62.7
15 th Ave. Gate	64.0	62.0	60.6	60.4	60.3	59.7	59.0	58.8	58.6

Source: Aspen Environmental Group 2004.

Notes:

Traffic noise levels are expressed as Leq(h) for 2020 PM peak hour traffic at 50 feet from the center line of the roadway at the gate, except for noise levels at the 14th Avenue Gate under the Park Presidio Boulevard Access Variant, which are the combined noise levels of this access at 100 feet plus the 14th Avenue Gate at 50 feet.

Includes all pass-through traffic, inbound and outbound in future year 2020.

dBA = A-weighted decibel scale

L_{EQ}(H) = equivalent energy indicator; average noise over one hour.

3.6.2.2 Alternative 1: PTMP Alternative

On a short-term basis, limited noise would occur from rehabilitation activity (with this alternative and Alternatives 2, 3, and 4). Much of the rehabilitation work would occur within the existing buildings, which would shield outside areas from noise. Outdoor work would include infrastructure upgrades, pavement removal, and landscaping. No building demolition or replacement construction would occur. All rehabilitation activities would be required to implement measures to manage construction-type noise (PTMP EIS Mitigation Measure NR-23). With these measures in place, the short-term noise from rehabilitation would be minimized.

Proposed rehabilitation of the PHSH complex would introduce noise-sensitive housing to an area of the Presidio that is near a major traffic corridor that can cause excessive noise (Park Presidio Boulevard). The results of noise monitoring (see Table 21) illustrate that at buildings on Wyman Avenue, or at other buildings proposed for rehabilitation for residential use elsewhere on the lower or upper plateau, the existing noise levels are within the 67 dBA NAC. This means that there are no areas within the PHSH district where the existing noise would preclude future residential use. Additionally, the Trust would enforce noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) for new residences. New residences within the PHSH district (under this alternative or Alternatives 2, 3, and 4) would therefore not be exposed to excessive noise.

Operation and occupation of the rehabilitated PHSH district would cause increased traffic noise that could be noticeable for residents in the adjacent neighborhoods. Because no location in the PHSH district exceeds the FHWA NAC shown in Table 22, traffic noise increases are evaluated by considering whether they would cause noise to approach or exceed the NAC. The PTMP EIS illustrated that, although noticeable traffic noise increases (greater than 3 dBA) would occur on roadways providing access to the PHSH district, future traffic would not cause noise levels to approach or exceed the NAC (PTMP EIS, page 265). Traffic noise levels at residences and the former Marine Hospital Cemetery near Battery

Caulfield Road were not estimated because none of the alternatives would notably affect traffic volumes on Battery Caulfield Road. Traffic noise levels caused by this alternative (and other alternatives) in the vicinity of the 14th and 15th Avenue Gates are shown in Table 22.

Compared to the Requested No Action Alternative, noise from traffic at the 14th Avenue Gate under this alternative would increase above existing conditions, but not to levels that would exceed those anticipated under the PTMP EIS. Alternative 1 would include employment and educational uses attracting a high level of daytime activity and a sizeable adult and school age residential population. This means that noise would tend to occur during both the daytime and evenings. Evening and weekend noise would also occur with the residential population. The noise levels shown in Table 22 indicate that the traffic noise impacts experienced by residences in the adjacent city neighborhood would not exceed the NAC or levels common and accepted in urban areas like the Richmond district.

3.6.2.3 Alternative 2: Infill Alternative

Approximately 48,000 sf of infill development would be built and 48,000 sf of building area would be demolished with this alternative. Demolition and construction activities would cause noise levels to be elevated for the short term of the construction phase. Demolition and most construction activities are capable of causing routine noise levels of approximately 79 to 84 dBA at 100 feet from the activity if noise control is not used, or 69 to 74 dBA with noise control. Demolition activities could include mechanical wrecking and use of an on-site temporary concrete crushing operation, especially if concrete would be recycled on-site. Construction could require use of dozers, loaders, trucks, cranes, compressors, and pneumatic tools. During the periods of demolition and concrete crushing operation, and periods of heavy truck activity for material removal or delivery, noise levels for receptors near the site or along roads providing access to the site could be considerable.

Demolition, rehabilitation, and construction would generally occur more than 400 feet from any residences in the City of San Francisco. An exception to this would be if implementation of the new alternative access to Park Presidio Boulevard occurs. The edge of this new roadway segment would be approximately 100 feet from the nearest residence on 14th Avenue, and the majority of the construction work for the new intersection would occur about 300 feet from homes (see further discussion in Section 3.6.2.6, Park Presidio Boulevard Access Variant, below). Other exceptions would include minor roadway improvements near the gates, parking lot improvements, landscaping, or infrastructure upgrades. The non-historic wings of Building 1801 are more than 400 feet from the nearest City residence.

All demolition, rehabilitation, and construction activities would be required to implement measures to manage construction-type noise (PTMP EIS Mitigation Measure NR-23). Construction activities would be confined to previously developed or “disturbed” areas of the PHSB district to avoid noise and other indirect impacts on sensitive natural settings within and adjacent to the district. The south-facing dune slope behind the PHSB complex will be managed as a buffer (see Hospital Buffer Zone on Figure 25), which will serve to shield wildlife on the upper plateau from noise within the complex. Furthermore, construction schedules would minimize noise impacts on wildlife, including nesting birds during the

breeding season (PTMPS EIS Mitigation Measure NR-9). With these measures in place, short-term noise levels would be minimized.

Traffic noise generated by occupation and operation of this alternative would be less than in Alternative 1. Alternative 2 would include a greater adult and school-age residential population. This means that noise would tend to occur less in the daytime and more during evenings and weekends than under Alternative 1, which would involve a higher level of employment and weekday activity. The noise levels shown in Table 22 indicate that residences in the adjacent city neighborhood would not experience significant traffic noise impacts.

3.6.2.4 Alternative 3: No Infill Construction

Although this alternative would not involve infill construction, construction-related noise would be greater than in Alternative 1 due to demolition of approximately 125,000 sf of building area on the lower plateau. Demolition activities could include mechanical wrecking and use of an on-site temporary concrete crushing operation, especially if concrete would be recycled on-site. The measures identified in the PTMP EIS and committed to as part of project implementation would avoid or minimize noise impacts during all demolition and rehabilitation phases.

The traffic noise that would be generated by occupation and operation of this alternative would be less than that of Alternative 1 and roughly similar to that of Alternative 2. Alternative 3 would include an adult and school-age residential population that would be greater than in Alternative 1 and less than in Alternative 2. With the residential population, less daytime noise and more evening and weekend noise would occur than would be anticipated with Alternative 1, which would involve more employment and weekday activity. Compared to Alternative 2, evening and weekend noise for Alternative 3 would likely be similar. The noise levels shown in Table 22 indicate that residences in the adjacent city neighborhood would not experience significant traffic noise impacts.

3.6.2.5 Alternative 4: Battery Caulfield Alternative

Construction-related noise would be greater than in other alternatives because of demolition of approximately 116,000 sf of building area on the lower plateau and 73,000 sf of new construction, including 56,000 sf within Battery Caulfield. All demolition, rehabilitation, and construction activities would be required to implement measures to minimize construction-type noise impacts, including those on wildlife (particularly the California quail), as identified below and in Section 3.12, Biology, of this SEIS.

The traffic noise that would be generated by occupation and operation of this alternative would be less than that of Alternative 1 and similar to that of Alternatives 2 or 3. Alternative 4 would include senior housing, whereby some of the noise impacts would occur during evening and weekend periods because the senior population would attract more visitors during those times. Compared to Alternatives 2 and 3, evening and weekend noise for Alternative 4 would likely be less because the senior population would probably be less active than the adult and school-age inhabitants under those alternatives. The noise

levels shown in Table 22 indicate that residences in the adjacent city neighborhood would not experience significant traffic noise impacts.

3.6.2.6 Park Presidio Boulevard Access Variant

The new access would help to remove some traffic from 14th and 15th Avenues and locate it within the Presidio, farther from homes in the adjacent neighborhood. Although the alternative access route would be entirely within the Presidio, noise from traffic on this route would still be audible at the 14th Avenue Gate. The closest edge of the roadway for the new alternative access would be approximately 100 feet from the nearest existing house in the City of San Francisco. In this analysis, noise from traffic at the 14th Avenue Gate is combined with noise from traffic on the new access, and the combined noise level for the house is shown in Table 22. As with other alternatives, the noise impacts for the new access alternatives would not exceed the NAC. Temporary construction noise impacts under the variant would be greater than without the variant because short-term construction of the road would occur closer to the existing houses.

3.6.2.7 Cumulative Effects

Noise from PHSB district development, including operational traffic noise, would coincide with anticipated region-wide growth in traffic noise, especially from traffic on Park Presidio Boulevard, which could increase by roughly 1.2 dBA L_{eq} between existing conditions and 2020. Noise from any PHSB alternative would only affect the area adjacent to or in the vicinity of the PHSB district. Other Presidio construction projects, such as the remediation of existing landfills in the area, could overlap with PHSB development, creating additional noise. All construction projects would be required to conform to measures to manage construction-type noise, ensuring that short-term noise increases would be minimized. The cumulative effects of other foreseeable changes in traffic noise were analyzed in the PTMP EIS and were found to be minor (PTMP EIS, page 369). Under any alternative, PHSB development would not exceed the noise levels anticipated in the PTMP EIS.

3.6.3 MITIGATION MEASURES

The following measures are adapted from the PTMP EIS and were adopted as conditions of approval at the end of the PTMP planning and environmental review process. Implementation of these measures will eliminate the potential for significant impacts related to the proposed action and its contribution to cumulative noise increases in all alternatives.

NR-8 *Natural Sounds* – The former Marine Hospital Cemetery, the Nike Swale, and Quail Commons have been identified as areas important to natural soundscapes, both for recreation and wildlife, and will be monitored during construction or other activities that could be detrimental to this value. These noise-sensitive areas will also be protected by establishing a construction schedule that limits disturbance during bird nesting activity (see PTMP EIS Mitigation NR-9 *Wildlife and Wildlife Habitat*).

NR-23 *General Construction/Demolition Noise* – During construction, contractors and other equipment operators will be required to comply with the San Francisco Noise Ordinance (San Francisco Municipal

Code, Section 2907b), which requires that each piece of powered equipment, other than impact tools, emit noise levels of not more than 80 A-weighted decibels (dBA) at 100 feet. To reduce noise impacts, barriers will be erected around construction sites and stationary equipment such as compressors; this will reduce noise by as much as 5 dBA. To further reduce noise impacts on visitors, some construction sites will be temporarily closed, and appropriate barriers placed at a distance of 250 feet from the sites.

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

PTMP EIS Mitigation Measure NR-25 *Traffic Noise Monitoring and Attenuation* applies to areas some distance from the PSHH district and does not apply to the proposed alternatives.

3.7 Visual Resources

3.7.1 AFFECTED ENVIRONMENT

Important views and other visual resources are described on pages 122 to 123 of the PTMP EIS. This description is incorporated here by reference, and portions relevant to the PSHH district are summarized below and expanded upon as necessary.

3.7.1.1 Visual Characteristics of the PSHH District and Surrounding Areas

The Presidio as a whole is a major visual resource for the San Francisco Bay Area, and its forested ridges and green aspect provide marked contrast to the adjacent urban landscape. The historic forest is one of many scenic resources, and stands in and around views toward the Golden Gate Bridge, the Pacific Ocean, and the Bay. Nearby are steep bluffs covered with gray-green coastal scrub, picturesque valleys, and distinguished historic buildings.

Developed areas within the PSHH district are in severely deteriorated condition, and many buildings and paved areas provide an unsightly contrast to the beautiful natural surroundings and scenic vistas. Building 1801, the PSHH (see Figure 14), is particularly derelict, with cyclone fencing around its perimeter and visibly deteriorated building materials on all facades. The non-historic wings almost completely obscure the historic front façade.

Other areas on the lower plateau, such as the houses along Wyman Avenue and the paved parking areas south and west of the PSHH, are equally deteriorated. Where buildings have been rehabilitated, such as Building 1808, or where views are available toward surrounding areas, visual characteristics are more



FIGURE 14. BUILDING 1801, EXISTING CONDITIONS

Source: Presidio Trust, 2004

pleasing. For example, the hillside north of the Central Green once housed a terraced garden that is long overgrown, and now forms a forested “buffer” between the lower plateau and the upper plateau (see Figure 15).

On the upper plateau, paved areas are worn and untidy, and include an abandoned tennis court, an abandoned parking area that now provides space for stock piles of green waste and compost, and the former Nike Missile Site at Battery Caulfield. Built into the slope at two elevations, Battery Caulfield is an unsightly mix of heavy equipment, stock-piled materials, and broken pavement (see Figure 16). The only evidence of the former missile installation is rusted metal doors that lie flush to the ground surface, and the soil berms that were constructed or retained nearby.

Visually attractive resources on the upper plateau include vegetated areas between and around Battery Caulfield and the composting area. Here a trail wanders through an area where the natural landscape seems close at hand, and trees delineate the edge of the Presidio Golf Course.

3.7.1.2 Important Views

Dramatic views are available from Battery Caulfield, from the PSHH, and from many other areas on the lower plateau (see Figure 17). Of particular note are views from the parking lot west of the PSHH, where the Presidio Trails and Bikeways Master Plan calls for development of a scenic vista point to take advantage of spectacular views of Lobos Valley and the Pacific Ocean. Looking east, views from upper stories of the PSHH hold Mountain Lake in their foreground with an urban panorama of the City’s neighborhoods beyond.

3.7.2 ENVIRONMENTAL CONSEQUENCES

The potential impacts of use and development within the Presidio on visual resources are assessed on pages 247 to 252 of the PTMP EIS. No impacts specific to the PSHH district were identified, and the analysis concluded that the visual character of the Presidio would not be substantially altered. This analysis is supplemented below, with an assessment of the issues specific to the alternatives being considered for the PSHH project.

3.7.2.1 Requested No Action Alternative

The Requested No Action Alternative would fail to address the noticeable deterioration of buildings and surrounding landscapes in the PSHH district. Some buildings would be occupied, but most would remain vacant and boarded up. Views to and from the site would not change appreciably, although other planned projects, such as construction of trails, remediation of old Army landfills, and enhancement of natural areas between the lower plateau and Battery Caulfield, would result in some visual improvements. The non-historic wings of the PSHH would remain in place, and would be secured against deterioration and vandalism to the extent feasible. The same would apply to the houses along Wyman Avenue that are viewed from Park Presidio Boulevard.



FIGURE 15. VIEW LOOKING NORTH FROM THE CENTRAL GREEN, EXISTING CONDITIONS

Source: Presidio Trust, 2004



FIGURE 16. VIEW TOWARD BATTERY CAULFIELD, EXISTING CONDITIONS

Source: Presidio Trust, 2004

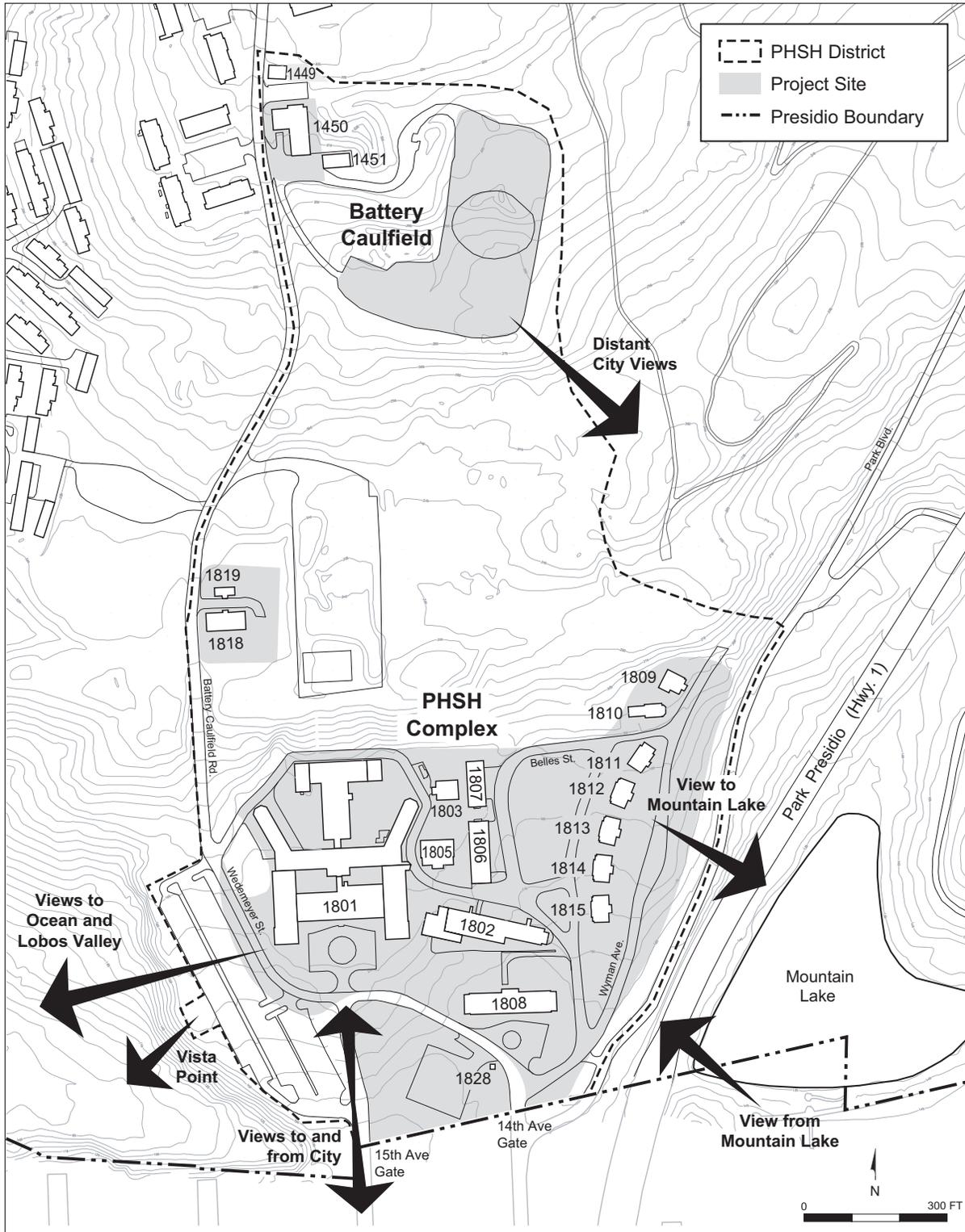


FIGURE 17. IMPORTANT VIEWS TO AND FROM THE PSH DISTRICT

Source: Presidio Trust, 2004

3.7.2.2 Alternative 1: PTMP Alternative

By rehabilitating and reusing existing buildings, improving the surrounding landscape, and accommodating planned access and open space improvements, Alternative 1 would positively affect 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 in kind, parking areas would be re-landscaped, and open space areas would be improved.

The views to and from the PSHH district shown in Figures 14 to 16 would not change dramatically as a result of Alternative 1, because all historic and non-historic elements would be retained and no new construction would occur. However, the planned use of 14th 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.

Similar to the Requested No Action Alternative, Alternative 1 would retain the non-historic wings of the main hospital building, but Alternative 1 would improve their appearance by replacing or repairing damaged façade materials.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Lighting levels associated with new housing would not exceed levels experienced in the surrounding neighborhood, although because of the size of the hospital building, its lighted windows would be visible from several blocks south on 15th Street. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.¹⁸

3.7.2.3 Alternative 2: Infill Alternative

Similar to Alternative 1, Alternative 2 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 2 would re-clad the non-historic wings of the PSHH and would remove the central loggia and lobby structure connecting the non-historic wings of the building, revealing the principal façade of the historic building (see Figure 18). Alternative 2 would also potentially remove up to two floors of the non-historic wings to reduce their visual mass and reveal the cornice line of the historic building façade (see Figure 19). All of these changes would represent beneficial visual impacts above and beyond the beneficial impacts described for Alternative 1 above.

¹⁸ See Appendix A, Response to Comment A.6.2 Analysis of Visual Resources and Lighting for an expanded discussion of lighting, including applicability of local and state lighting standards.



FIGURE 18. BUILDING 1801, ALTERNATIVE 2 (Non-historic Wings Remain at their Current Height)

Source: Presidio Trust, 2004