

3.5 CULTURAL AND HISTORIC RESOURCES

3.5.1 AFFECTED ENVIRONMENT

The Presidio of San Francisco (Presidio) was designated a National Historic Landmark District (NHL) in 1962. With a period of significance from 1776 to 1945, the Presidio is recognized for its use as a Spanish colonial, Mexican, and U.S. Army military post.

In 1993, the landmark designation was updated to further identify this valuable resource (1993 NHL Update). At that time, more than 650 buildings, sites, structures and objects were considered as contributing to the significance of the NHL District. The update includes both archaeological and cultural landscape resources. Buildings that are contributing and non-contributing to the NHL designation are identified in Figure 3.5-1. Included in this Figure are four buildings subject to this Environmental Assessment; they are buildings 1040, 1062, 1063, and 1469. Information presented below was provided by the *Historic Buildings of the Presidio: Physical History Reports* (NPS no date) and the *NHL Update*.

The Area of Potential Effect (APE) for historic buildings are each of the individual building's interior and exterior features. The APE for both archaeology and cultural landscapes follows the construction activity zone including areas where ground disturbing activities could occur. The APE is show on Figure 3.5-2.

HISTORIC ARCHITECTURE

Building 1040 is a two-story brick structure constructed in 1900 as a powerhouse and steam plant. In 1909, two wing additions were completed at the north side of the building. It was altered again after 1942 to include the removal of a slate hip roof and circular brick smokestack. The second story and flat roof were added sometime before 1967. Exterior features such as the common bond brickwork, arched windows and door openings, and stone elements are considered highly sensitive to alteration. The building's historic use is technologically significant as one of the earliest powerhouses at the Presidio. As such, interior elements, the exposed brickwork, catwalk, some equipment, arched openings, and original wood doors, are highly sensitive to alteration.

Building 1062 is a two-story reinforced concrete structure constructed in 1922 as a quartermaster's shop. It includes a loading dock along the entire southern façade. The building retains its Spanish-tiled hip roof with exposed rafter tails. The 1948 alteration to a theater use infilled the building's double hung windows. Despite the theater adaptations, the building retains much of its original form, shape and materials. Exterior features highly sensitive to alteration include two circular roof vents, exposed wood frame concrete walls, the concrete loading dock, the fenestration pattern, simple rafter tails, and iron bars over some windows. Interior elements

highly sensitive to alteration include the reinforced concrete skeleton of post and beams, exposed steel roof trusses, and the wooden formwork clearly seen on the concrete walls and ceiling.

Building 1063 is a large one-story wood frame and corrugated metal warehouse constructed in 1941 as a medical supply warehouse. Exterior elements highly sensitive to alteration include the axial gable roof, corrugated iron exterior siding, six circular roof vents, the fenestration pattern, sliding warehouse doors, and six-light hopper windows. Interior features highly sensitive to alteration include the open warehouse space, concrete slab floor, and exposed structure.

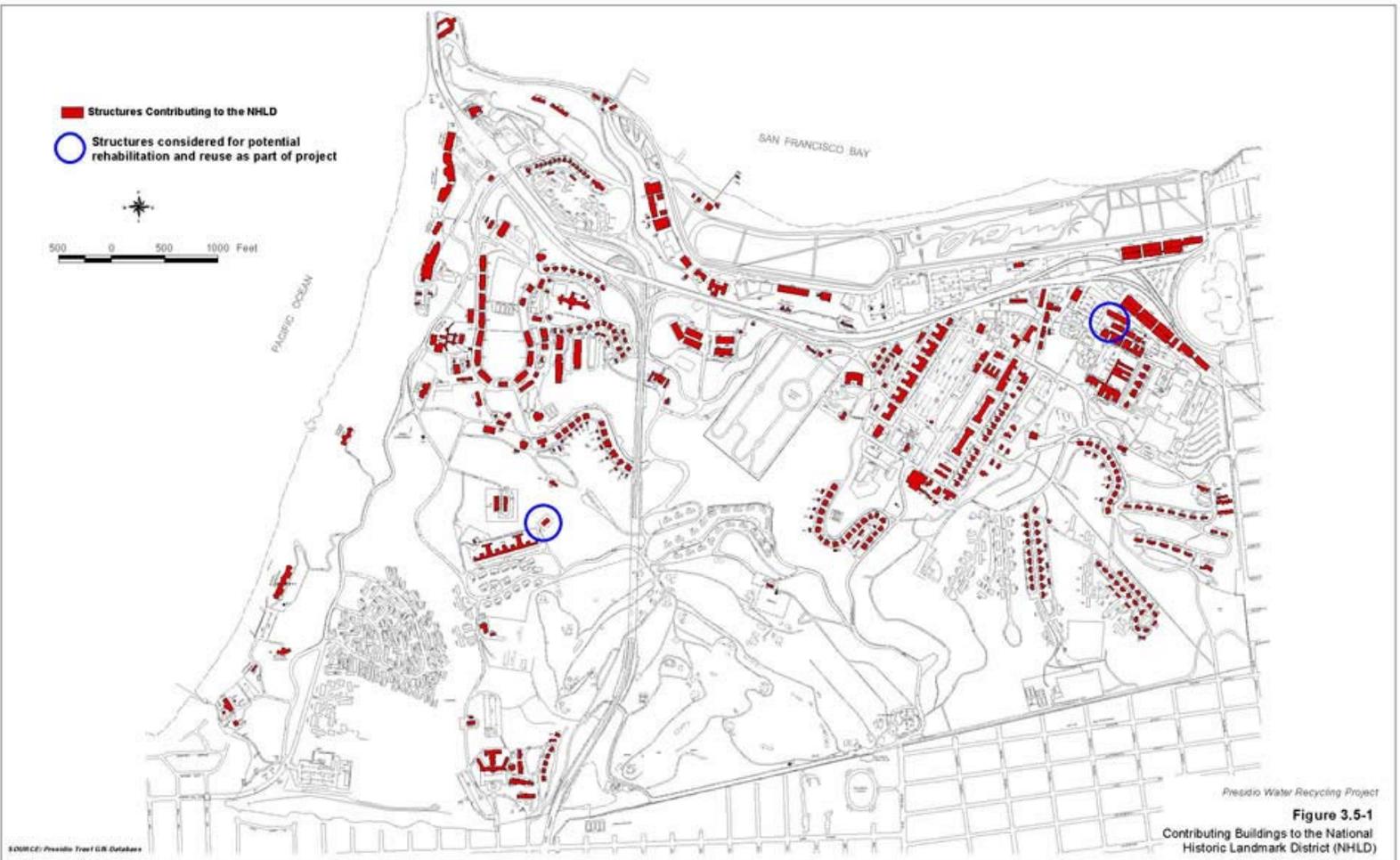
Building 1469 is a deep concrete structure built in 1897 as a reservoir. The two-compartment structure has a wood-frame cover with shiplap siding and gabled roof. It retains much of its original character, experiencing little to no modification.

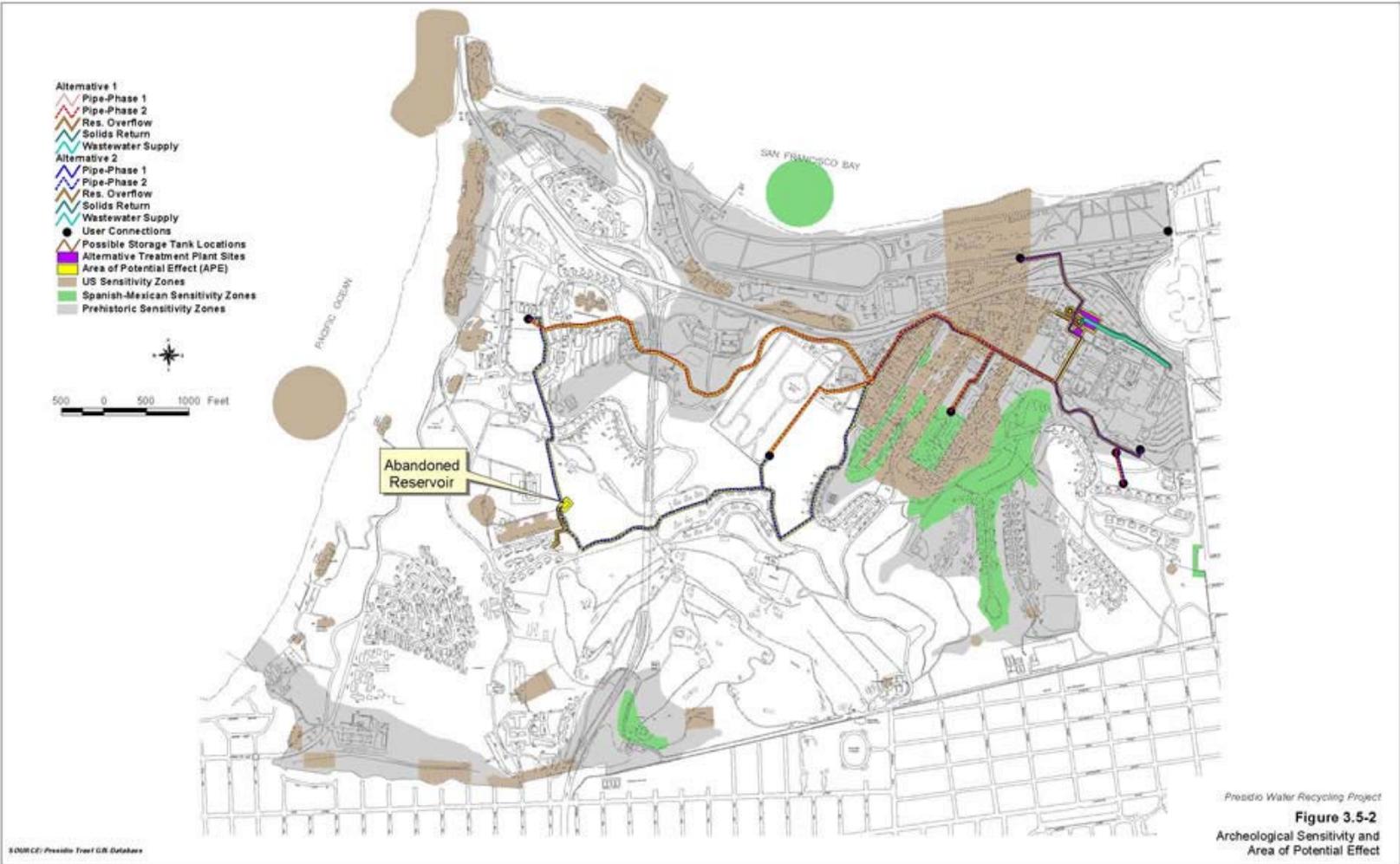
ARCHEOLOGICAL RESOURCES

Areas of known and predicted archaeological sensitivity within the Presidio were first identified in the 1993 NHL Update, which took a predictive and sensitivity approach to identification of historic archaeological resources that contribute to the NHL. The 1993 NHL Update treated the Presidio as a single archaeological site or property with numerous contributing features that are functional components of a single long-term military occupation. An effort was also made during this update to identify those areas where prehistoric sites (i.e., associated with Native American use prior to European contact) could be expected based on site locations known in other areas of the San Francisco region. Today, a digital sensitivity map is maintained in the Presidio Archaeology Lab, a joint facility of the Presidio Trust and National Park Service. It is continually revised using new information from historical research, field monitoring, and geomorphological analyses. The archaeological sensitivity map and accompanying data bases contain information on prehistoric and historic features throughout the Presidio, which span the time period of Native occupation, and the Spanish (1776-1822), Mexican (1822-1846) and American (1846-1994) military occupations. This map was used as the basis for evaluating the alternatives' potential effect on archaeological resources (see Figure 3.5-2).

CULTURAL LANDSCAPE

A *cultural landscape* is a “geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or that exhibit other cultural or aesthetic values” (Gilbert and Dolan 1998). The landscape characteristics that contribute to the integrity of a cultural landscape include spatial organization and cluster arrangement, land use, cultural traditions, circulation, topography and drainage, vegetation, buildings and structures, views and vistas, small-scale features, and archaeological sites. The cultural landscape of the Presidio is significant as part of the National Historic Landmark District status. Various features including mature vegetation and character-defining features of the historic forest adjacent to Lincoln Avenue and Kobbé Avenue and in the vicinity of Building 1469, and cobble retaining walls and steps in the





vicinity of Kobbe Avenue and Ruckman Terrace occur within the APE and could be affected by the proposed project (refer to impact analysis below for additional detail).

REGULATORY BACKGROUND

The Presidio is listed as a National Historic Landmark District on the National Register of Historic Places. As such, the proposed project is subject to review under the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires agencies to identify historic properties and assess whether implementation of an undertaking will have an adverse effect on such properties. If adverse effect is determined, then the agency undertakes consultation with the State Office of Historic Preservation, the Advisory Council on Historic Preservation, interested parties, and the public in an attempt to resolve adverse effects. In general, conformity with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Rehabilitating Historic Buildings can avoid an adverse effect. These standards include the retention of historic character, materials, and finishes, repair rather than replacement of deteriorated features, the protection of archaeological resources, and the general preservation of historic integrity. These standards also include guidelines for the treatment of cultural landscapes. These include principles related to the retention of landscape elements, including both tangible and intangible elements of the historic landscape. Compliance with Section 106 at the Presidio of San Francisco, for those projects determined to have no adverse effect, are reviewed pursuant to a programmatic agreement dated March 5, 2002.

The Native American Graves Protection and Repatriation Act (NAGPRA) addresses the rights of lineal descendants, Indian tribes, and Native Hawaiian organizations to Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. It requires federal agencies and institutions that receive federal funds to provide information about Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony to lineal descendants, Indian tribes, and Native Hawaiian organizations, and upon presentation of a valid request, dispose of or repatriate these objects to them.

3.5.2 ENVIRONMENTAL CONSEQUENCES & MITIGATION

During the planning phase of the project, Historic Preservation Specialists, Cultural Landscape Specialists, and Historical Archaeologists were consulted in order to identify and refine project alternatives and minimize the impact of the project on the Presidio's significant historic resources.

ALTERNATIVE 1 (CENTRALIZED STORAGE), PHASE 1

Effects on Historic Structures

Building 1063 (Preferred Site)

Alterations to this building to accommodate the proposed treatment plant equipment would include the removal of several 6x6 center posts, removal of a portion of the existing floor slab for

the process tank foundation, removal of a portion of the mezzanine, and widening of an existing access door by three feet on the south façade. Seismic improvements would also be required in order to bring the building to current code levels. All alterations to this building would be done in accordance with the Secretary of the Interior's Standards for Rehabilitation. The impact to fabric highly sensitive to alteration would not be significant, and would not result in an adverse effect to the historic building.

Building 1040

In order to accommodate the proposed treatment plant's mechanical requirements, existing equipment would need to be removed. In addition, it would also be necessary to remove several interior walls. An access door on the west façade of the building would be increased to provide access for equipment installation and maintenance. Seismic improvements would also be required in order to bring the building to current code levels. All alterations to this building would be done in accordance with the Secretary of the Interior's Standards for Rehabilitation. In order to avoid significant and adverse effects, interior and exterior features would be further evaluated, and those identified as highly sensitive to alteration would be retained to the maximum extent feasible, as determined during future design-level work.

Building 1062

Modifications to this building for rehabilitation as a treatment plant would include the removal of the non-historic theater installation. Approximately one third of the concrete floor between the first floor and basement would be removed to accommodate process tanks. A 15-foot access door would be installed on the south façade. Seismic improvements would also be required in order to bring the building to current code levels. Alterations to this building would be done in accordance with the Secretary of the Interior's Standards for Rehabilitation. In order to avoid significant impact and adverse effect, interior and exterior features would be evaluated further and those identified as highly sensitive to alteration would be retained to the maximum extent feasible during future design-level work.

The rehabilitation and reuse of a historic building for the proposed water recycling plant would be done in accordance with the Secretary of the Interior's Standards and no significant or adverse impact on historic architecture would occur.

Effects on Archeological Resources

Wastewater Diversion & Solids/Sludge Return Pipeline

As shown on Figure 3.5-2, these project components are located within a prehistoric sensitivity zone (specifically referred to as the P2 Estuary Bluff Predicted Prehistoric Area in the NHL Updated). The area was subject to previous archaeological testing for the Letterman Digital Arts Center project, and no archaeological features were identified. Impacts could occur from a “post-

review discovery”, that is, the discovery of a previously unknown archaeological site during construction. Should that occur, the Presidio Trust would follow 36 CFR, Part 800 of the National Historic Preservation Act procedures outlined in the Programmatic Agreement.

Recycled Water Treatment Plant and Recycled Water Pump Station

There would be no known impacts to archaeological features.

Recycled Water Storage Reservoir, Standby Potable Water Service and Pipeline

The proposed locations for the Recycled Water Storage Reservoir and Standby Potable Water Service are within the footprint of a known environmental remediation site (Landfill 6). (Refer to Section 3.6 for a discussion of Hazardous Materials.) No impacts to archaeological features are expected, providing the reservoir excavation does not exceed the footprint of the landfill remediation. The pipeline is within the P2 Estuary Bluff Predicted Prehistoric Area, which has not previously been investigated in its entirety. Historic fill deposits vary in depth throughout the alignment. In some instances the overflow pipeline may be above any soil strata that date to the pre-contact period and no impact would occur. In other areas the pipeline may intrude into strata that potentially could contain prehistoric deposits. These would be handled as a “post review discovery,” described above.

Impacts to archaeological features from Alternative 1 Phase 1 are expected to be absent or minimal. All ground-disturbing construction activities will be subject to archaeological monitoring in accordance with the NPS, GGNRA Programmatic Agreement or the Presidio Trust Programmatic Agreement Stipulation XIII and the Presidio Archaeological Monitoring Protocols (which ever is applicable at the time of monitoring). Should significant archaeological features be discovered during construction, the Presidio Trust will act in accordance with Stipulation XIV “Discoveries.”

Implementation of the proposed pipelines and other ground-disturbing activities under Alternative 1 (Phase 1) would not have a significant or adverse impact on archeological features.

Effects on Cultural Landscapes

Recycled Water Treatment Plant

Reuse of one of three alternative buildings for the proposed water recycling plant would require building rehabilitation and seismic retrofit. It is possible that some limited exterior work may be needed, such as the installation of seismic footings. However, based on field reconnaissance, exterior work outside the footprint of the buildings, is unlikely to disturb historic fabric associated with the cultural landscape.

Implementation of Alternative 1, Phase 1 would not have a significant or adverse impact on cultural landscapes.

General Effects on NHL District

Signage required for the identification of recycled water use area (per water recycling permit), as well as piping and other equipment that is other than within a structure, may impact the National Historic Landmark. In addition, boxes for electrical equipment that are above ground may impact the National Historic Landmark. The design, scale, and location of signage and any above ground equipment/fixtures would meet the Secretary of the Interior’s Standards.

All signage or above ground fixtures would be designed and implemented in accordance with the Secretary of the Interior’s Standards, and would not have a significant or adverse impact on the NHL district.

ALTERNATIVE 1 (CENTRALIZED STORAGE), PHASE 2

Effects on Archeological Resources

During Phase 2 of Alternative 1, the recycled water distribution system, the irrigation system connections and site retrofit could adversely effect the following predicted historic and prehistoric archaeological features, as described in the NHL Update:

<u>#</u>	<u>Description</u>	<u>Dates</u>
F18	Laundress and Enlisted Quarters	1866-1890
F20	Stream Ravine Dump Area	1866-1890
P2	Estuary Bluff Prehistoric Area	0000-1776

Mitigation Measure CH-1: The Trust would seek to avoid archaeological features. If avoidance of the American period historic features and prehistoric sites during Phase 2 is deemed infeasible, consultation with the State Historic Preservation Officer in accordance with 36 CFR Part 800 and the provisions of the Presidio Trust Programmatic Agreement would be implemented. Mitigation would include controlled excavation prior to construction, using scientific recording methods and resulting in recovery of any significant cultural materials or information. Archaeological excavations would proceed in accordance with a research design and data recovery plan based on background data, sound planning, and accepted archaeological methods. The data recovery plan would provide for the reporting and dissemination of results, as well as interpretation of what has been learned in a manner that is accessible and understandable to the public. Appropriate arrangements for the permanent curation of archaeological materials and records would be carried out in accordance with federal regulation 36 CFR Part 79. All archaeological work to be carried out would be under the supervision of persons meeting the Secretary of the Interior’s Professional Qualifications Standards (48 FR 44738-44739). Mitigation

measures for F-38 and F-44 from the 1993 NHL could be limited to field recordation and collection during construction, along with appropriate levels of documentary research.

Following implementation of Mitigation Measure CH-1, Alternative 1 (Phase 2) would not have a significant or adverse impact on archaeological features.

Effects on Cultural Landscapes

During Phase 2 of Alternative 1, the water distribution system has the potential to affect circulation, vegetation, and small-scale features of the Presidio. Removal of mature vegetation adjacent to Lincoln Avenue and Kobbe Avenue could result in an alteration of character-defining features of the historic forest, and thus all construction in this area should be confined to the existing road prisms. There are many significant features including cobble retaining walls and steps in the vicinity of Kobbe Avenue and Ruckman Terrace. Installation of pipeline in this area could result in the disturbance or removal of historic fabric, and therefore all construction would be confined to the existing road prism.

Mitigation Measure CH-2: Proposed pipeline alignments along Kobbe Avenue, Lincoln Avenue and Ruckman Terrace would be confined to the existing asphalt road prism. Final design of the various project components would be reviewed by a Trust cultural landscape specialist prior to construction to ensure that cultural landscapes are adequately protected. The exact location of the distribution system will be flagged or painted on the corridor route.

With mitigation measure CH-2, this alternative would not have a significant or adverse effect cultural landscapes within the Presidio.

ALTERNATIVE 2 (MULTIPLE STORAGE SITES), PHASE 1

General Historic and Cultural Resource Effects

Phase 1 of Alternative 2 proposes the same project components as Phase 1 of Alternative 1. The same three alternative building sites (for the proposed treatment plant), wastewater diversion pipeline, alternative recycled water storage tanks, and distribution pipelines would be included under Alternative 2, Phase 1. Therefore, the impact on cultural and historic resources would be the same as previously described for Alternative 1, Phase 1 above.

Implementation of Alternative 2, Phase 1 would not have a significant or adverse impact on cultural and historic resources.

ALTERNATIVE 2 (MULTIPLE STORAGE SITES), PHASE 2

Effects on Historic Structures

Building 1469

Only general information related to the type of alterations that might be needed to reuse this existing reservoir are known at this time. As described in Chapter 2, it is assumed that roof repairs, painting, installation of a bug screen, seismic retrofit, telephone/electric service, level controls, and possibly a liner or coating system to provide a water-tight structure would be needed. Because this is a Phase 2 project, additional investigation of the structure would be needed in the future closer to the time of proposed reuse (i.e., in approximately 7 to 10 years). At that time, a detailed study of the reservoir's current condition would be conducted, and specific improvements would be identified. Alterations to this historic feature would be done in accordance with the Secretary of the Interior's Standards for Rehabilitation so that no adverse effect would occur.

The proposed rehabilitation and reuse building 1469 (abandoned reservoir) would be done in accordance with the Secretary of the Interior's Standards and no significant or adverse impact on historic architecture would occur

Effects on Archeological Resources

Under Phase 2 of Alternative 2, the proposed recycled water distribution system, irrigation system connections and site retrofit could adversely effect the following predicted historic and prehistoric archaeological features (as described in the NHL Update):

#	Description	Dates
F18	Laundress and Enlisted Quarters	1866-1890
F20	Stream Ravine Dump Area	1866-1890
F38	Fort Winfield Scott Ordnance Storage & Shops	1891-1914
F44	Battery McKinnon-Stotsenberg	1897-

Impacts to archaeological features from Alternative 2, Phase 2 could occur from subsurface ground disturbance required for the installation of water distribution lines and irrigation connections in areas where these do not currently exist.

The proposed alignment would be in close proximity to the predicted locations of F-18 and F-20. The Laundress and Enlisted Quarters (F-18) is under investigation by Caltrans as part of the Doyle Drive Project, and more information will be available prior to the completion of the NEPA process for this project. Impacts to the Stream Ravine Dump Area (F-20), if any, are expected to be minimal due to the thickness of modern fill deposits and the shallow depth of the construction disturbance (less than six feet). The alignment also coincides with predicted features from F-38

Fort Winfield Scott Ordnance Storage & Shops and F-44 Battery McKinnon-Stotsenberg, which may incur minor disturbance. According to the 1993 NHL update, the contributive value of historic archaeological sites is believed to diminish somewhat after 1890, and by 1917 there is insufficient data or disciplinary research to suggest that archaeological remains would contribute substantially to the landmark (p. 8-15).

Mitigation Measure CH-1 would apply to Alternative 2 also.

Following implementation of Mitigation Measure CH-1, Alternative 2 (Phase 2) would not have a significant or adverse impact on archeological features.

Effects on Cultural Landscapes

Reuse of the existing abandoned reservoir during Phase 2 of Alternative 2 could adversely effect the cultural landscape by altering circulation patterns (trails) and removing vegetation within the historic forest. The vegetation within the fence is not historic; but the access pipeline, which would be required to connect to the reservoir, is routed through historic forest. This area of the historic forest is in poor health and was already identified for replanting under the adopted *Presidio Vegetation Management Plan* (NPS and Trust, 2001). No significant impact would occur as a result of this alternative (refer to Section 3.4 for additional discussion of the biological impacts).

Installation of the recycled water distribution system during Phase 2 (Alternative 2) also has the potential to adversely affect the cultural landscape by altering or removing historic fabric, including circulation systems including sidewalks and steps, vegetation and historic plant materials, and small-scale features, such as river rock and cobble drainage systems. Historic fabric includes sidewalks and steps throughout the distribution route. There are several features including cobble and river rock drains and gutters in the vicinity of the proposed alignment at Infantry Terrace that may be affected. Installation of pipeline in this area could result in the removal or disturbance of these features, and thus all pipeline construction would be confined to the existing roadway to avoid impacts to the landmark district status. The pipeline alignment between Infantry Terrace and Washington Boulevard goes through an area of historic forest. Removal of mature vegetation could result in an alteration of character-defining features of the historic forest, and thus all construction in this area should be confined to the existing utility corridor (where trees were previously removed). The proposed pipeline between the existing Compton Road and Hitchcock Street would also occur within an area of historic forest (primarily eucalyptus). Construction activities in this location would likely require the removal of individual trees. This area of historic forest has been identified for reforestation and rehabilitation in the adopted *Presidio Vegetation Management Plan* (VMP). Consistent with the VMP, the proposed pipeline construction activities would be coordinated with the reforestation effort and would be done in accordance with the Secretary of Interior's Guidelines for Treatment of Cultural Landscapes.

Mitigation Measure CH-3: The proposed pipeline corridor along Infantry Terrace would be kept within the asphalt road prism in order to avoid important cultural landscape features in this area, which include river rock and cobble drainage systems. The proposed pipeline corridor between Infantry Terrace and Washington Boulevard would also be kept within the existing disturbed utility corridor to avoid disturbing or removing character-defining features of the historic forest. Consistent with mitigation measure CH-2, final design drawings would be reviewed by a Trust cultural landscape specialist prior to construction to ensure cultural landscapes are adequately protected.

With mitigation measure CH-3 and coordination with the adopted VMP reforestation efforts, this alternative would not have a significant or adverse effect on cultural landscapes within the Presidio.

NO ACTION ALTERNATIVE

Under the No Action Alternative, none of the water recycling facilities would be constructed. The existing water distribution system would continue to meet water needs (domestic and irrigation) at the Presidio with potable water, and no physical changes affecting historic resources would occur.