DRAFT

ENVIRONMENTAL ASSESSMENT

SAN FRANCISCO VA MEDICAL CENTER
VA SAUSALITO ANNEX

Prepared for:

San Francisco VA Medical Center
4150 Clement Street
San Francisco, CA  94121

December 2015
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Executive Summary

This Draft Environmental Assessment (EA) evaluates the potential environmental consequences resulting from a U.S. Department of Veterans Affairs (VA) Proposed Action to construct approximately 8,000 square feet of new modular space and supporting improvements at 25 Libertyship Way in Sausalito, Marin County, California, to be used by the VA for administrative and office purposes. The Proposed Action would also rehabilitate the exterior of an existing vacant Machine Shop building located at the property. This Proposed Action is the subject of this review pursuant to the National Environmental Policy Act of 1969, as amended (NEPA).

This document has been prepared by the VA, acting as lead agency, in accordance with the NEPA statute (Public Law 91-190, 42 U.S. Code [USC] 4321-4370f); Council on Environmental Quality (CEQ) regulations implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508); Environmental Effects of the Department of Veterans Affairs Actions (38 CFR Part 26); and Department of Veterans Affairs NEPA Interim Guidance for Projects, 30 September 2010.

Purpose and Need

The Proposed Action would construct approximately 8,000 square feet of modular space at the subject site and rehabilitate the exterior of an existing vacant Machine Shop at the site. The Proposed Action is needed to support current space deficits at the SFVAMC Fort Miley Campus, which is located approximately eight miles to the south of the subject site at Lands’ End in the city of San Francisco, and to protect and preserve the existing Machine Shop from further disrepair. The VA proposes to address these needs by relocating select administrative and office space from the Fort Miley Campus to the modular buildings on the subject site and by replacing the exterior façade and roofing of the Machine Shop in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and Section 106 of the National Historic Preservation Act.

Background

The VA acquired the site from the U.S. Army Corps of Engineers in 2006 with the intent of developing the site in a way that would help alleviate the serious space constraints at its main San Francisco campus at Fort Miley on Clement Street (VA Project Number 662-329. Initially, the Machine Shop would have been renovated to house biosafety laboratories, Health Systems Research and Development laboratories, and administrative and operational support for those functions. This renovation would have included replacement of all existing mechanical, electrical, plumbing, HVAC, security, and fire protection systems, as well as construction of fixed permanent ceiling structures. External improvements would have included resurfacing the existing parking area and landscaping. Lead-based paint (LBP) remediation would have occurred, also.

As these initial plans developed, it became apparent that available funding for Project Number 662-329 would not be sufficient. Subsequent to that initial planning effort, the VA developed preliminary plans to raze the Machine Shop and Butler building on the site to construct a new Research Center structure on the east end of the property. The decision to raze the existing structures was based primarily on their compromised integrity (i.e., occupant safety, financial responsibility) and needed upkeep, as well as constraints to flexible interior space planning. However, this project was dropped based on opposition...
from the City of Sausalito and its residents, as well as from the State Office of Historic Preservation, based on the site's documented historical significance.

Since that time, the space constrictions at the Fort Miley campus have persisted and the condition of the Machine Shop has continued to deteriorate. To address these issues, the current project – or Proposed Action – is proposed. The decision to be made as a result of the analysis in this EA is to decide if the Proposed Action would result in significant impacts to the human environment and if an Environmental Impact Statement (EIS) needs to be prepared. If no significant impacts are determined, an EIS would not be prepared and VA would select the Proposed Action for implementation. The decision made will be documented in a Finding of No Significant Impact (FONSI).

Scope of this Environmental Assessment

This EA evaluates the potential direct, indirect, short-term, and long-term impacts on the natural and human environment resulting from the Proposed Action. The EA also addressed potential cumulative impacts that may result from reasonably foreseeable projects in the region. The analysis of potential impacts is based on the full build-out of the Proposed Action. The EA documents VA’s compliance with the requirements of NEPA, as amended and the CEQ regulations implementing NEPA (40 CFR 1500-1508).

Resource areas examined in this EA and potentially impacted include aesthetics, land use, air quality, cultural resources, geology, hydrology and water quality, wildlife and habitat, noise, solid and hazardous materials, transportation and parking, and utilities.

Alternatives Considered in this Environmental Assessment

The CEQ regulations require Federal agencies to use the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of the actions upon the quality of the human environment. To identify alternatives for environmental analysis, the VA rigorously explored and objectively considered other potentially reasonable alternatives to the Proposed Action.

Given the current space constraints at the Fort Miley campus, no alternative sites were available there. Off-site alternatives were dropped from consideration as not being cost-effective in the San Francisco market. Funding to acquire the subject property was provided for the purpose of developing expansion capabilities on agency-owned property. The VA could not justify making the financial investment to develop highly-specialized laboratory space on property it did not own. Off-site contract service alternatives were dropped from consideration, as new facilities coming on line in the San Francisco market did not meet the agency’s needs.

No other action alternatives were identified that adequately met the purpose and need for the Proposed Action. Therefore, one action alternative and a no action alternative were retained for detailed analysis.

- **Proposed Action**: The Proposed Action is the construction of approximately 8,000 square feet of new modular space and supporting improvements at the subject site to be used by the VA for administrative and office purposes, as well as the rehabilitation of the exterior of the existing Machine Shop building located at the subject site.

- **No Action Alternative** - Under the No Action Alternative, the Proposed Action would not be implemented. The No Action Alternative presumes future conditions at the subject site as they
currently exist. Under the No Action Alternative, none of the changes to the subject site under the Proposed Action would occur. Existing issues with structural degradation, security, vagrancy, value depreciation, and maintenance would persist. Functions that would be transferred from the VA’s San Francisco Fort Miley campus would remain there, continuing to constrain the ability of the VA to fulfill its mission of improved health care services.

Summary of Potential Environmental Impacts

The EA examines the potential human and natural environmental consequences of the Proposed Action and any effects associated with the reasonably foreseeable reuse of the MPD campus. Potential environmental effects associated with the Proposed Action and the No Action Alternative are summarized below.

Proposed Action

The Proposed Action will be required to comply with all applicable Federal, state, and local laws and regulations. In identifying potential environmental effects associated with the Proposed Action, the VA has taken into account all applicable measures and restrictions protective of human health and the environment that are required by existing laws and regulations.

Implementation of the Proposed Action would not adversely affect the quality of the human or natural environment. The Proposed Action would not result in any significant long-term adverse effects on aesthetics, land use, air quality, geology, hydrology and water quality, wildlife and habitat, noise, solid and hazardous materials, transportation and parking, and utilities.

The Machine Shop has been determined eligible for the National Register of Historic Places and a likely contributing element to as yet evaluated historic district. The Proposed Action would replace the existing siding and paint, which have been found to contain asbestos and lead-based paint over regulatory levels, with an alternate material maintaining the same dimensions and overall appearance of the historic façade. On May 7, 2015, the VA “reinitiated” consultation with the State Historic Preservation Officer (SHPO) on this property to seek concurrence with the Proposed Action. The VA is also currently developing plans for conducting archaeological testing as necessary, in consultation with the SHPO, the Federated Indians of Graton Rancheria, the City of Sausalito and other interested parties. The VA will complete consultation with the SHPO for the Proposed Action and the archaeological testing plan in accordance with Section 106 of the National Historic Preservation Act prior to completing the final design and implementing the project.

No Action Alternative

No significant adverse impacts would be expected from the implementation of the No Action Alternative. However, under the No Action Alternative, the exterior rehabilitation of the Machine Shop would not occur and would continue to deteriorate. Additionally, space issues at the Fort Miley campus would persist. Therefore, the VA’s purpose and need for the Proposed Action would not be achieved.

Areas of Potential Controversy

Implementation of the Proposed Action could generate controversy related to short term increases in construction-related noise and traffic, parking distribution, and other nuisances typical of construction activities. In many cases, construction-related effects are minimized through compliance with VA standard specifications and Federal, state and local regulations. Minimization measures are also included
to minimize effects. For example, reducing construction-related noise and dust; developing and implementing a temporary parking plan to prevent displacement of on-site parking; and more.

Over the long-term, the Proposed Action would have a beneficial effect by stabilizing the external deterioration of a National Register-eligible structure, removing asbestos and lead-based paint from the site, and the overall efficiency of operations space on the site and at the Fort Miley campus.
1. Introduction

1.1 Project Background

<table>
<thead>
<tr>
<th>Project Title</th>
<th>SFVAMC Sausalito Annex, Project No. 662-622</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Agency Name &amp; Address</td>
<td>San Francisco VA Health Care System</td>
</tr>
<tr>
<td></td>
<td>4150 Clement Street</td>
</tr>
<tr>
<td></td>
<td>San Francisco, CA 94121</td>
</tr>
<tr>
<td>Contact Person &amp; Information</td>
<td>Chanh Lam, Program Specialist</td>
</tr>
<tr>
<td>Project Location</td>
<td>25 Liberty Ship Way, Sausalito, Marin County, California (APN 063-100-011)</td>
</tr>
</tbody>
</table>

Description of Proposed Action

The Proposed Action would construct approximately 8,000 square feet of new modular space and supporting improvements at the subject site to be used by the VA for administrative and office purposes. The Proposed Action would also rehabilitate the exterior of an existing vacant Machine Shop building located at the property.

Surrounding Land Uses and Setting

The subject site is located at the edge of Richardson Bay near an industrial waterfront northwest of the downtown area of Sausalito. Southeast of the subject site is an office complex that was once part of the Marinship facility. Northwest of the subject site is the U.S. Army Corps of Engineers Bay Model Visitor Center. Northeast of the subject site is a row of small shed buildings constructed on piers and pilings that extend over the water’s edge into Richardson Bay. To the southwest of the subject site are a surface parking lot and a wood frame building occupied by a local business.

1.2 NEPA Process and Public Involvement

This Draft Environmental Assessment (EA) evaluates the potential environmental consequences resulting from the U.S. Department of Veterans Affairs (VA) Proposed Action described above. This document has been prepared by the VA, acting as lead agency, in accordance with the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190, 42 U.S. Code [USC] 4321-4370f), as amended; Council on Environmental Quality (CEQ) regulations implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508); Environmental Effects of the Department of Veterans Affairs Actions (38 CFR Part 26); and Department of Veterans Affairs NEPA Interim Guidance for Projects, 30 September 2010.

NEPA establishes an environmental review process for action undertaken by Federal agencies. The review process is intended to help public officials make ‘informed’ decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 CFR 1500.1). Further, the NEPA process recognizes the importance of public involvement in the agency decision-making process.
This EA evaluates the potential direct, indirect, short-term, and long-term impacts on the natural and human environment resulting from the Proposed Action. The EA also addressed potential cumulative impacts that may result from reasonably foreseeable projects in the region.

Resource areas examined in this EA and potentially impacted include aesthetics, land use, air quality, cultural resources, geology, hydrology and water quality, wildlife and habitat, noise, solid and hazardous materials, transportation and parking, and utilities.

This EA evaluates the potential direct, indirect, short-term, and long-term impacts on the natural and human environment resulting from the Proposed Action and a No Action Alternative. The EA also addresses potential cumulative impacts that may result from reasonably foreseeable projects in the region. Resource areas examined in this EA include aesthetics, land use, air quality, cultural resources, geology, hydrology and water quality, wildlife and habitat, noise, solid and hazardous materials, transportation and parking, and utilities.

As part of the NEPA process, VA has released this Draft EA for a minimum 30-day public review and comment period. A Notice of Availability (NOA) announcing the review period was published in the San Francisco Chronicle and mailed to federal, State, and local agencies, tribes, and interested members of the public. Federal, State, and local agencies, tribes, and interested members of the public are encouraged to review and comment on the Draft EA during the 30-day review period. Hard- and electronic-copies of the Draft EA were mailed to federal, State, and local agencies, tribes, and interested members of the public; posted to the VA Website (website link here), and made available for public review at the Sausalito Public Library.

The public’s comments on the Draft EA, as well as feedback from applicable resources and permitting agencies, will be responded to in writing as part of a Final EA and considered by VA to evaluate the Proposed Action’s alternatives and environmental impacts before a final decision is made.

The decision to be made as a result of the analysis in this EA is to decide if the Proposed Action would result in significant impacts to the human environmental and if an Environmental Impact Statement (EIS) needs to be prepared. If no significant impacts are determined, an EIS would not be prepared and VA would select the Proposed Action or an alternative action from this EA for implementation. The decision made will be documented in a Finding of No Significant Impact (FONSI).

1.3 Purpose and Need

The Proposed Action would construct approximately 8,000 square feet of modular space at the subject site and rehabilitate the exterior of an existing vacant Machine Shop at the site. The Proposed Action is needed to support current space deficits at the SFVAMC Fort Miley Campus, which is located approximately eight miles to the south of the subject site at Lands’ End in the city of San Francisco, and to protect and preserve the existing Machine Shop from further disrepair. The VA proposes to address these needs by relocating select administrative and office space from the Fort Miley Campus to the modular buildings on the subject site and by replacing the exterior façade and roofing of the Machine Shop in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and Section 106 of the National Historic Preservation Act.
1.4 Location and Setting

The proposed action would be located on Federal lands owned by the VA located within the City of Sausalito, Marin County, California (see Figure 1, Regional/Project Location). Specifically, the proposed action would be located at 25 Liberty Ship Way (see Figure 2, Project Vicinity), which is a site approximately 1.3 acres in size. As part of the proposed action, office space for approximately 75 staff members would be permanently relocated from the SFVAMC Fort Miley Campus, located at 4150 Clement Street in San Francisco, to the subject site.

The subject site currently consists of a vacant Machine Shop that was constructed in 1942, an empty Butler building along the eastern property boundary, and a paved area between the two (see Figure 3, Project Site). The site is relatively level and drains away from the existing Machine Shop to storm drain inlets northeast and southeast of the building. Existing utilities are located north, west, and south of the existing Machine Shop. Liberty Ship Way adjacent to the subject site is a two-lane roadway, which connects with Marinship Way and Bridgeway Boulevard to provide regional access to the site.

The Machine Shop was formerly used by the Marinship shipyard between approximately 1942 and 1945. The Machine Shop was later used as the South Pacific Division Laboratory by the U.S. Army Corps of Engineers between 1950 and 1997, which conducted geotechnical and analytical testing. In 2006, the U.S. Army Corps of Engineers transferred the building to the General Services Administration, who in turn transferred it to the VA.

Previous historical studies have determined that the Machine Shop is eligible for listing in the National Register of Historic Places (NRHP) for several eligibility criteria, including for its association with World War II; the Civil Rights Movement; its distinctive characteristics of World War II construction, primarily wood construction and industrial design; and for the information it provides on Native American habitation and historic elements of the North Coast Railroad (Advanced Design Consultants undated).

The Machine Shop is approximately 25,000 square feet in size. It is primarily a one story high bay structure, but also includes an intermediate level floor. The Machine Shop consists of wood roof trusses and heavy timber framing. The roof has been partially removed over approximately a third of the building, which has exposed the building to weather damage.

Previous sub-surface investigations performed at the site identified polychlorinated biphenyls (PCBs) in shallow soils, as well as petroleum hydrocarbons in soil and groundwater. Remediation of PCB contaminated soil was completed at the site in 2006, which included excavation and off-site disposal of PCB contamination. The property is currently defined by the California Department of Toxic Substances Control as Category 4, which are areas where release of hazardous materials has occurred and all removal actions necessary to protect human health and the environment have been taken. Land use restrictions established for the property require that it remains as a commercial and/or industrial use, and uses such as day care centers, elder care centers, hospitals, schools for persons under 21, and residences are prohibited.
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LEGEND

Project Location

Polytech Associates
VA Sausalito EA

Job Number 8411577
Revision Date Jan 2015

Regional/Project Location Figure 1

Project Location

VA Sausalito Annex 04

Technical Work Figures

Regional/Project Location.indd

GHD

2025 Mercury Way Suite 100 Santa Rosa California 95403 USA  T 1 707 523 1010  F 1 707 527 8679  W www.ghd.com

VA Sausalito EA

Regional/Project Location Figure 1
Figure 3

Project Site

Bay Model

10 Liberty Ship Way

Burkell Plumbing

Project Boundary

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Polytech Associates
VA Sausalito EA

Project Number

8411577

Revision

Jan 2015

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2. Alternatives

2.1 Development of Alternatives

The CEQ regulations require Federal agencies to use the NEPA process to identify and assess reasonable alternatives to proposed actions that would avoid or minimize adverse effects of the actions upon the quality of the human environment. This chapter describes the alternatives development process, alternatives considered but eliminated from further review, and alternatives selected for analysis in this EA.

2.1.1 Alternatives Considered But Eliminated from Further Review

To identify alternatives for environmental analysis, the VA rigorously explored and objectively considered other potentially reasonable alternatives to the Proposed Action. Primary aspects contemplated in this vetting process included:

- Off-Site Alternative: Leasing off-site space (meaning the San Francisco campus) to house the functions described in Alternative 1 was considered. This alternative was dropped from consideration, however, as not being cost-effective. Funding to acquire the subject property was provided for the purpose of providing expansion capabilities on agency-owned property. The VA could not justify making the financial investment in developing highly-specialized laboratory space on property it did not own. This alternative did not meet the agency’s purpose for pursuing the project.

- Off-Site Contract Services: Although the VA’s documentation noted that new space was coming online in the San Francisco real estate market to accommodate research facilities, it was determined that this space would not suit for the VA’s specific laboratory requirements. This alternative was dropped from consideration as it did not meet the agency’s needs.

No other action alternatives were identified that adequately met the purpose and need for the Proposed Action. As noted in Section 1.3, Purpose and Need, this action is proposed at the Sausalito site due to space constraints at the VA’s San Francisco campus. Therefore, no action alternatives were considered on that campus. The VA chose to limit the consideration of alternatives to the Proposed Action, described in detail in the following section.

2.1.2 Alternatives Selected for Detailed Analysis

Based on the discussion above, one action alternative and a no action alternative were retained for detailed analysis.

- Proposed Action: The Proposed Action is the construction of approximately 8,000 square feet of new modular space and supporting improvements at the subject site to be used by the VA for administrative and office purposes, as well as the rehabilitation of the exterior of the existing Machine Shop building located at the subject site.

- No Action Alternative - Under the No Action Alternative, the Proposed Action would not be implemented.
2.2 Proposed Action

The Proposed Action would construct approximately 8,000 square feet of new modular space and supporting improvements at the subject site to be used by the VA for administrative and office purposes. The Proposed Action would also rehabilitate the exterior of an existing vacant Machine Shop building located at the subject site. The proposed site layout is shown in Figure 4, Proposed Site Layout. A description of each of these components and construction activities is provided below.

Interior renovation of the Machine Shop is not included in the proposed action. The Machine Shop would remain unoccupied following the completion of the project. Future interior renovation and use of the Machine Shop would be evaluated separately under NEPA once a specific purpose is identified for this structure.

2.2.1 New Modular Buildings

The new modular buildings would provide approximately 8,000 square feet of office space for approximately 75 occupants. The proposed modular buildings would be located on the northeast corner of the subject site, adjacent to the existing Machine Shop (see Figure 3, Project Site). Modular buildings with raised floors and entrances would take up most of the area between the Machine Shop and the eastern fence on the site. A structural slab on grade would be constructed to support the modular buildings. Three options for modular building and parking layouts were considered, each of which having a similar site design. The configuration considered in this analysis is shown in Figure 4. The modular buildings would have a shared access ramp and entrance, making them compliant with the Americans with Disabilities Act (ADA) and providing the best possible emergency responder access within the site.

Access to the site would be provided from an existing private driveway on the northeast side of the property that connects to Liberty Ship Way. Vehicles would exit the site from a new exit proposed on the southwest side of the property that would connect to Marinship Way. Parking would be provided to meet VA and City of Sausalito requirements. Striping for new parking stalls would be provided within existing paved areas on the north side of the site. This would include approximately 38 parking spaces on the subject site, with additional parking to be provided through use of a shared parking lot with the adjacent Bay Model Visitor Center, pending agreement from the U.S. Army Corps of Engineers.

The modular buildings would be connected to existing utilities at the subject site. Domestic water service would be provided from existing mains on the north side of the modular buildings. A new sewer pipeline would be installed from the modular buildings to the southwest, parallel to the southern wall of the Machine Shop to an existing manhole. The new sewer pipeline is anticipated to utilize gravity flow, however, if required, a new lift station and force main would be installed at the subject site.

The modular buildings would be served from a new PG&E service. Self-contained air conditioning units would be provided in each modular building, as well as piping for plumbing fixtures and water heaters. A Fire Alarm System would be designed to meet all required Federal, State and local Codes.

Site storm water would continue to flow to existing drop inlets north and south of the site. Drainage from the modular building roofs would flow from downspouts onto the asphalt surface and then sheet flow into existing drainage structures.
2.2.2 Exterior Rehabilitation of Machine Shop

Rehabilitation of the Machine Shop façade would be conducted in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and the California Historical Building Code to protect the integrity of the historical resource. The proposed action would replace the entire exterior façade of the Machine Shop, which has deteriorated over time due to exposure to the marine environment. The original façade framing and materials would be repaired, as needed, and the entirety of the existing finish material would be removed and replaced with an alternate material, such as fiber cement board siding. The existing plywood siding was maintained in fair condition for many decades because it had formerly been encapsulated by asbestos siding. The proposed alternate material would maintain the same dimensions and overall appearance as the historic exterior façade, while providing greater protection and longevity to the building envelope. Fiberglass mat gypsum sheathing would be installed in a layer under the alternate siding material (i.e., fiber cement board) to protect the building’s interior in similar manner to the previous asbestos siding and more effectively than plywood.

The proposed action would also remove the existing roofing materials on the Machine Shop and install a new roof consisting of plywood roof sheathing and a thermoplastic polyolefin roofing system. The existing roof trusses and framing would be repaired as needed. Existing skylights on the roof of the Machine Shop would be preserved in place.

Approximately half of the Machine Shop windows would be repaired or replaced to fix broken window panes and frames. Windows to be kept in place would be treated for hazardous materials, including removal of lead-based paint from surrounding frames and sashes. Existing Machine Shop doors would be cleaned, repaired, or replaced, as needed.

Some components of the Machine Shop that were related to its previous use as the South Pacific Division Laboratory would be removed. This would include several exterior fans, ducts, conduits, and sloughs. Chain link fencing that is installed around portions of the Machine Shop would also be removed, as would electrical conduits and plumbing lines that are attached to the exterior of the Machine Shop.

2.2.3 Construction Activities

Construction is anticipated to begin in October 2015 and require approximately six months to complete. Construction of the new modular buildings and associated improvements is expected to occur first, followed by the exterior renovation of the Machine Shop. Construction work is anticipated to be limited to the hours of 8:00 AM to 5:00 PM Monday through Friday.

During construction, worker vehicles and haul trucks would access the site from U.S. Highway 101 and local streets, including Bridgeway Boulevard, Marinship Way, and Liberty Ship Way. Staging areas for construction equipment and supplies would be located on-site. The types of equipment that would likely be required include an excavator, backhoe, front end loader, paver, roller, and a variety of trucks. The number of construction-related vehicles traveling to and from the subject site would vary on a daily basis. The estimated size of the construction workforce at any one time during construction is anticipated to range between six to 10 workers.

The Proposed Action does not involve the Butler building on the east end of the subject property. It is currently empty and is anticipated to remain so. Trees at the subject site would be protected during construction, to the extent feasible. However, construction may require removal of approximately seven trees along the east border of the subject site in the vicinity of the modular buildings, as well as trimming...
of several trees whose canopies extend onto or over the Machine Shop. Approximately 675 feet of the existing fencing around the site would be removed – primarily along the site’s north, east, and west sides. Some fencing would be removed from the south side, though along the Machine Shop structure is anticipated to remain. New fencing would be installed along the eastern site boundary between each of the modular buildings for security purposes. Security gates would be placed at either end of the access between the modular buildings and existing structure.

Extension of water, sewer, electric, and communications facilities within the construction area would be coordinated with utility owners. New utilities would be installed using open trench construction methods, which would include removal of surface material; excavation and shoring of a trench; installation of pipe bedding, pipelines and conduits; backfilling of the trench; and resurfacing. Open-trenching for utility relocations would generally be excavated to a depth of up to 4- to 6 feet. Shallow trenching, approximately 30-inches deep, would also be required for electrical conduits for exterior lighting.

The type of modular buildings that is proposed at the site is typically delivered in 12-foot sections and are then placed and finished on-site. The modular buildings would be anchored to a structural slab to be installed on site, which would prevent the need for placement of fill or asphalt. Some of the existing asphalt areas at the site would be leveled to create a smooth surface for accessible parking and circulation routes.

The proposed action would be designed to meet as many silver-certification criteria of the Leadership in Energy & Environmental Design (LEED) program as possible, but certification is not a part of the proposed action.

The existing plywood and other materials on the exterior of the Machine Shop may be contaminated with lead based paint and asbestos, which would be properly removed and disposed of at off-site disposal sites. During exterior rehabilitation of the Machine Shop, hazardous wastes would be required to be separated, stored, and disposed of according to local, state, and Federal regulations. VA standard construction specifications require various controls to be employed during construction activities related to protecting the environment and managing hazardous and non-hazardous waste. Because these controls are required by VA, implementation of these controls is assumed as part of implementation of the proposed action. The list below provides examples of several applicable VA standard construction specifications, but is not intended to be comprehensive.

- **Section 01 00 00 – General Requirements**: These requirements include executing construction activities in such a manner as to interfere as little as possible with normal functioning of the site and its surroundings, including operations of utility services, fire protection systems and any existing equipment and access required to remain in operation. Roads, walkways and entrances to the site would be required to be kept clear of construction materials, debris and standing construction equipment and vehicles.

- **Section 01 57 19 – Temporary Environmental Controls**: These requirements include such measures as setting work area limits, protecting the landscape, minimizing interference with and protection of wildlife, reducing exposure of unprotected soils, protecting disturbed areas, installing erosion and sediment control devices, hazardous material spill prevention measures, managing spoil areas, and following good housekeeping procedures. They also require providing sound deadening devices on construction equipment and noise abatement measures to manage construction-related noise levels. Controls may include use of shields or other physical barriers to restrict noise transmission, providing soundproof housings or enclosures for noise producing
machinery, using efficient silencers on equipment air intakes, using efficient intake and exhaust mufflers on internal combustion engines, lining hoppers and storage bins with sound deadening material, and conducting truck loading, unloading, and hauling operations so that noise is kept to a minimum.

- **Section 01 74 19 – Construction Waste Management:** This specification section requires contractors to prepare and submit a written demolition debris management plan that includes procedures to be used for debris management, techniques to be used to minimize waste generation, and descriptions for material handling.

- **Asbestos Abatement:** Asbestos abatement would be performed as part of the exterior renovation of the Machine Shop in accordance with U.S. EPA’s National Emission Standard for Asbestos (40 CFR Part 61 - Subpart M) and applicable VA Division 02 Standard Specification Sections, including Section 02 82 13.21 (Asbestos Floor Tile and Mastic Abatement), Section 02 82 13.21 (Asbestos Roofing Abatement), Section 02 82 13.31 (Asbestos Transite Abatement), and others.

- **Section 02 83 33.13 – Lead-Based Paint Removal and Disposal:** A lead-containing paint removal plan would be required per this specification section. Removed paint chips and associated waste would be disposed of in compliance with Federal, state, and local requirements. Monitoring of airborne concentrations of lead would be required in accordance with 29 CFR 1910.1025. Removal of paint indoors and on the outsides of buildings would be performed in such a manner as to minimize contamination of work areas with lead-contaminated dust or other lead-contaminated debris/waste. Lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing which may produce airborne concentrations of lead particles would be collected and disposed of at an approved hazardous waste treatment, storage, or disposal facility.

### 2.3 No Action Alternative

The No Action Alternative presumes future conditions at the subject site as they currently exist. Under the No Action Alternative, none of the changes to the subject site under the Proposed Action would occur. Existing issues with structural degradation, security, vagrancy, value depreciation, and maintenance would persist. Functions that would be transferred from the VA’s San Francisco campus would remain there, continuing to constrain the ability of the VA to fulfill its mission of improved health care services. Although the No Action Alternative would not meet the purpose and need for the Proposed Action described in Section 1.3 (Purpose and Need), it is carried forward in this EA as prescribed by CEQ regulations and provides a baseline for analysis of the action alternative.
3. Affected Environment and Environmental Consequences

This chapter describes the affected environment and evaluates the potential direct, indirect, short-term, and long-term impacts for each relevant human and natural environmental resource potentially affected by the Proposed Action. An evaluation of the potential cumulative impacts resulting from the Proposed Action, when added to other past, present, and reasonably foreseeable future actions, is presented in Chapter 4 (Cumulative Impacts).

Each environmental resource area potentially impacted by the Proposed Action is addressed in its own section, numbered as follows:

- 3.1 Aesthetics
- 3.2 Land Use
- 3.3 Air Quality
- 3.4 Cultural Resources
- 3.5 Geology and Soils
- 3.6 Hydrology and Water Quality
- 3.7 Wildlife and Habitat
- 3.8 Noise
- 3.9 Floodplains, Wetlands, and Coastal Zone Management
- 3.10 Socioeconomics and Environmental Justice
- 3.11 Community Services
- 3.12 Solid and Hazardous Materials
- 3.13 Transportation and Parking
- 3.14 Utilities

Potential environmental impacts are identified, where applicable, according to their significance. According to the CEQ, the significance of an impact is determined by examining both its context and intensity (40 CFR 1508.27). Context is related to the affected region, the affected interests, and the locality, while intensity refers to the severity of the impact, which is based on the following considerations:

- Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial;
- The degree to which the Proposed Action affects public health or safety;
- Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;
- The degree to which the effects on the quality of the human environment are likely to be controversial;
The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks;

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration;

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The degree to which the action may adversely affect districts, sites, highways, or structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources;

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act; and

Whether the action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.

The impact analysis compares projected future conditions to the affected environment. For each resource area, the potential construction or operational impacts are identified, if applicable, and the methodology and general assumptions used in the impact analysis are presented. Each identified impact is characterized according to its significance. Impacts are either significant (with corresponding mitigation, as feasible) or not significant. Although the focus of this analysis is on identifying potential adverse effects, some beneficial effects also are identified by the analysis.

Under NEPA, the Federal agency proposing an action must evaluate the environmental effects (impacts) that can reasonably be anticipated to be caused by or result from the Proposed Action and alternatives. The Proposed Action will be required to comply with all applicable Federal, state, and local laws and regulations. The potential environmental impacts that have been evaluated are those impacts which can reasonably be expected to result from the lawful implementation of the Proposed Action. In identifying direct impacts and reasonably foreseeable indirect impacts, the VA has taken into account all applicable measures and restrictions protective of human health and the environment that are required by existing laws and regulations. In many instances, the existence of such laws and regulations renders impacts that might have occurred in the absence of such laws highly unlikely and not reasonably foreseeable. In other instances, such laws and regulations work to lessen potential impacts to levels that are not significant. Because compliance with applicable laws is mandatory for the action proponent, compliance with the requirements of such laws and regulations is generally not identified separately as mitigation. Measures or controls that can be taken to reduce impacts to a level that is not significant are suggested, as appropriate.
Federal Regulations Establishing Environmental Standards

FI - REQUIRES FURTHER INVESTIGATION
MR - MITIGATION REQUIRED, NON-COMPLIANCE ANTICIPATED
CA - COMPLIANCE ANTICIPATED

NA EXECUTIVE ORDER 11988, FLOODPLAIN MANAGEMENT
   (Specify 100-YEAR, CRITICAL ACTION, or 500-YEAR)

NA EXECUTIVE ORDER 11990, PROTECTION OF WETLANDS

NA EXECUTIVE ORDER 11987, EXOTIC ORGANISMS

CA EXECUTIVE ORDER 12088, FEDERAL COMPLIANCE

NA EXECUTIVE ORDER 12898, FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL
   JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS

CA EXECUTIVE ORDER 13423, STRENGTHENING FEDERAL ENVIRONMENT, ENERGY, AND
   TRANSPORTATION MANAGEMENT

CA EXECUTIVE ORDER 13514, FEDERAL LEADERSHIP IN ENVIRONMENTAL, ENERGY, AND
   ECONOMIC PERFORMANCE

CA FEDERAL WATER POLLUTION CONTROL ACT, SEC. 313, AS AMENDED BY CLEAN
   WATER ACT OF 1977 (33 USC 1323)

CA ENDANGERED SPECIES ACT AS AMENDED (PL 93-205)

NA WILD AND SCENIC RIVERS ACT (16 USC 1274 ET SEQ.)

CA NOISE CONTROL ACT OF 1972

NA SAFE DRINKING WATER ACT, SEC. 1447, (PL 93-523)

NA COASTAL BARRIER RESOURCES ACT (PL 97-348)

CA COASTAL ZONE MANAGEMENT ACT (16 USC 1451 ET SEQ., AMENDED BY PL 101-508)

NA EPA REGULATIONS ON DISCHARGE OF DREDGED OR FILL MATERIAL INTO
   NAVIGABLE WATERS (40 CFR 230)

CA EPA REGULATIONS ON DETERMINATION OF REPORTABLE QUANTITIES FOR
   HAZARDOUS SUBSTANCES (40 CFR 117)

CA EPA REGULATIONS ON THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
   (40 CFR 122)

NA EPA REGULATIONS ON POLYCHLORINATED BIPHENYLS MANUFACTURING,
   PROCESSING DISTRIBUTION IN COMMERCE AND USE PROHIBITIONS (40 CFR 761)

CA ADVISORY COUNCIL ON HISTORIC PRESERVATION REGULATIONS, PROTECTION OF
   HISTORIC AND CULTURAL PROPERTIES (36 CFR 800)
3.1  Aesthetics

IMPACTS

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ATTRIBUTES

- VEGETATION REMOVAL
- LANDSCAPE ALTERATION
- OPEN SPACE ALTERED
- NEW STRUCTURE CONSTRUCTION
- ADVERSE
- BENEFICIAL
- BUILDING RESTORATION
- UTILITY OR SERVICE AREA DEVELOPMENT
- GROUND IMPROVEMENT AMENITIES
- LONG TERM
- SHORT TERM
- CUMULATIVE

3.1.1  Affected Environment

3.1.1.1  Built Environment

The project site is a 1.3-acre property located in an area that was formerly part of the U.S. Army Corps of Engineers (Corps) Marinship Complex. Occupying the site are two unused buildings and other developments associated with the site's former uses, first by the Northwestern Pacific (NWP) Railroad, and later by the Corps. Covering over half of the site is an approximately 25,000-square-foot building that was formerly used as a Machine Shop for the Marinship shipyard between approximately 1942 and 1945, and later as the South Pacific Division Laboratory between 1950 and 1997. The building, which has deteriorated somewhat over time due to exposure to the marine environment, is partially surrounded by chain link fencing topped by barbed wire. The building has been determined to be eligible for listing in the National Register of Historic Places (Office of Historic Preservation 2014).

Storm drain inlets are situated northeast and southeast of the shop building; utilities are located on the north, west, and south. Also located on the project site is a metal storage shed (“Butler building”) that was constructed in 1948 and presumably used by the Corps for storage. Remnants of a previous spur of the Northwestern Pacific (NWP) railroad are present at the eastern border of the site. The site contains a total of eight mature eucalyptus and pine trees, mainly along the northeast site boundary, with one at the west corner of the building, as shown in Figure 2 (Project Vicinity). It also includes a planting strip lined with trees on the south side of the Machine Shop building, a few street trees along the east and north fence lines, and small groupings of trees in the vicinity of the storage shed in the east portion of the site. The remainder of the 1.3-acre project site is paved and used as an storage yard by the City of Sausalito.

The surrounding setting is industrial and commercial; Richardson Bay waterfront lies to the east. Bordering the site on the south is Liberty Ship Way; Marinship Way is situated to the west. South of the site is an office complex that was also once part of the Marinship shipyard complex. North of the site is the Corps Bay Model Visitor Center, which is a small museum dedicated to the history of Marinship, as well as the Corps’ Construction and Operations offices. Immediately east of the site is a row of small shed buildings constructed on piers and pilings that extend over the water’s edge into Richardson Bay. To the southwest of the site are a surface parking lot and a wood frame building occupied by a local business.
3.1.1.2 Existing Viewsheds

Because of the proximity of the project site to adjacent buildings, there are only limited long-distance views of the site. See Figure 3 (Project Site) for an aerial view of the site in relation to adjacent land uses. Visible to travelers along Liberty Ship Way and the adjacent office complex is a portion of the undeveloped paved area used for informal storage of miscellaneous equipment, a small portion of the deteriorating Machine Shop Building, and the surrounding chain link fence. Small groups of trees screen portions of the Machine Shop Building from view. The storage shed located on the site is largely blocked from view by the group of trees situated in the southeast corner of the site. Visible to travelers along Marinship Way are portions of the south wall of the Machine Shop which is partially blocked from view by the adjacent wood frame building occupied by a local business and the line of trees situated between the Machine Shop and the roadway. The north wall of the Machine Shop and chain link fence, undeveloped paved area used for storage, and storage shed are situated within the viewshed of the adjacent Bay Model Building. Views of the site from Richardson Bay are substantially blocked by the row of small shed buildings that are situated along the Bay, but not on the project site.

There are no officially designated Scenic Vistas located within the City of Sausalito, however the Marinship Specific Plan identifies several view corridors for Richardson Bay (City of Sausalito 1989). One of these view corridors (View Corridor B) is along the Liberty Ship Way right-of-way and provides a view of the Bay from Bridgeway Boulevard. This view corridor parallels the project site on the south. No officially state designated scenic highways exist in Marin County, but State Route (SR) 1 is identified by the California Department of Transportation (Caltrans) as an “Eligible State Scenic Highway – Not Officially Designated.” (Caltrans n.d.) SR 1 is located approximately 0.5 mile south of the project site and out of view. A bicycle path (i.e., Class II bike lane) runs along portions of Bridgeway Boulevard to the southwest of the project site (City of Sausalito 2012).

3.1.2 Assessment Methods

The impact analysis evaluates potential impacts to the existing visual character and quality of the project site and its surroundings from construction and operation of the Proposed Action and No Action Alternative.

3.1.3 Environmental Consequences

3.1.3.1 Proposed Action

Construction

Construction activities under the Proposed Action would result in typical construction-related short-term effects on the visual character and quality of the project site as viewed from public vantage points at surrounding Federal facilities to the north and east, as well as the commercial business located to the south and along portions of Libertyship Way and Marinship Way. The proposed removal of up to eight trees mostly in the eastern portion of the site would further open up views of construction activities from Libertyship Way. It is not anticipated that construction would result in new sources of substantial light or glare because of the nature of construction activities, equipment and materials, and the daytime construction schedule.

The degradation of the visual quality and character of the site caused by construction activities would be short-term, extending over the six-month construction period. The Department of Veterans Affairs (VA) would minimize impacts to the visual quality of the site by confining construction activities to the project...
site itself and by employing VA standard construction specifications, such as requiring that roads, walkways and entrances to the site are kept clear of construction materials, debris and standing construction equipment and vehicles; and requiring contractors to prepare and submit a written demolition debris management plan that includes procedures to be used for debris management, techniques to be used to minimize waste generation, and descriptions for material handling. With implementation of these minimization measures, temporary construction-related impacts on the visual quality and character of the site and surrounding area would not be substantial.

**Operation**

Although certain elements of the Proposed Action would result in a moderate long-term degradation of the visual character and quality of the project site as seen from surrounding viewpoints, on balance, the effect would be beneficial. The beneficial effects would result from stabilization and rehabilitation of the exterior of the deteriorating Machine Shop in accordance with the Secretary of the Interior’s Guidelines for Historic Properties, plus removing a portion of the chain link and barbed wire fencing on the site and replacing the boundary fencing. The Machine Shop is a two-story 25,000 square-foot building that dominates the visual character of project site. Clearing the project site of small storage containers and miscellaneous equipment that are currently scattered in the area proposed for the modular office building would also beneficially affect the visual quality of the site.

The proposed site developments would not be visible from SR 1, which is identified as eligible for designation as a State Scenic Highway. Views of the project site from the bike lanes along Bridgeway Boulevard are largely screened by groupings of mature trees along the roadway. The view corridor identified in the Marinship Specific Plan (View Corridor B) along the Liberty Ship Way right-of-way which provides view of the Bay from Bridgeway Boulevard would not be interrupted by proposed site developments. The proposed parking spaces to the west of the Machine Shop would result in a minor changes to the visual landscape, but would be consistent and compatible with existing parking areas surrounding the site. The improved vehicle exit onto Marinship Way would only minimally alter the existing visual character of this portion of the roadway.

The moderate adverse effects on the visual character of the site would result from the proposed removal of up to eight mature trees in the eastern portion of the site, which would expose the existing storage shed to views along a portion of Libertyship Way. In addition, proposed installation of approximately 8,000 total square feet of single-story modular office building space between the Machine Shop and storage shed would increase the density of development on the project site, thereby reducing the current feeling of open space in this area.

Security lighting would also be installed on the project site. Three lights would be installed on the Machine Shop building on the east side between it and the modular buildings and on the north side between it and the Bay Model building. Each of the modular buildings would have security lighting on their west sides. All security lighting would be located between structures and be directed downward to focusing on access areas. With the layout of the structures and the lighting being directly inward on the site, a potential for light trespass would not be great.

Therefore, operation of the Proposed Action would not substantially degrade the existing visual character or quality of the site and its surroundings, and would largely result a beneficial effect.
3.1.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the site that would take place under the Proposed Action would occur. Therefore, no additional short-term effects on the visual character of the site typical of construction activities would occur. In addition, no modular building installation or tree removals would occur that would alter the visual character of the site and existing public viewsheds. Under this alternative, however, the existing historic structure at the site would not be stabilized and rehabilitated. As a result, the No Action Alternative would not have the beneficial effects the visual character and quality of the site that would result from the Proposed Action.
3.2 Land Use

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ATTRIBUTES

- ENCROACHMENT ON EXISTING LAND USE
- CHANGE IN LAND USE PATTERN
- SERVICE AND OPERATIONAL HOSPITAL-MEDICAL FACILITY
- LABORATORIES - CLINICS
- ADMINISTRATIVE FACILITY
- ADVERSE
- BENEFICIAL
- SEWAGE – WASTE TREATMENT FACILITY
- UTILITIES
- ROADS AND PARKING
- RECREATIONAL
- GROUND IMPROVEMENTS
- CEMETERY
- LONG TERM
- SHORT TERM
- CUMULATIVE

3.2.1 Affected Environment

3.2.1.1 Existing and Adjacent Land Uses

The 1.3-acre project site is currently unused by the VA, but contains developments associated with former uses of the site by the Northwestern Pacific Railroad (NWP) and later by the U.S. Army Corps of Engineers. Occupying the west portion of the project site is the Machine Shop, an approximately 25,000 square-foot building that was formerly a part of the U.S. Army Corps of Engineers Marinship shipyard between approximately 1942 and 1945, and later as the South Pacific Division Laboratory between 1950 and 1997. This vacant building, which is eligible for listing in the National Register of Historic Places, encompasses over half of the project site and is partially surrounded by chain link fencing topped with barbed wire (see Figure 2, Project Vicinity). Storm drain inlets are situated northeast and southeast of the shop building and utilities are located on the north, west, and south. Also located on the project site is a metal storage shed (“Butler building”) that runs along the east site boundary. This shed was constructed circa 1948 and presumably was used by the U.S. Army Corps of Engineers for storage. More recently, this building has been vacant and occupied at various times by squatters or homeless individuals. Rails remaining from the site’s active days as a part of the Marinship operation are found in the pavement on the northeast portion of the site. It is currently unused and vacant. The site contains eight mature eucalyptus and pine trees that are situated in various portions of the site, as shown in Figure 2 (Project Vicinity). The remainder of the project site is paved and used as an informal storage yard (i.e., “corp yard”) by the city of Sausalito. The majority of the area, including the project site, is underlain by artificial fill which was created in 1942 to provide land for construction of the Marinship shipyard.

The project site is bounded on the south by Liberty Ship Way; Marinship Way is situated to the west. Access to the site is from two points – one each from Liberty Ship Way and Marinship Way. Adjacent to the site on the south is an office complex that was once part of the Marinship shipyard. Adjacent to the site on the north is the Bay Model Visitor Center and surface parking lot. On the east is a row of small shed buildings constructed on piers and pilings that extends over the water’s edge into Richardson Bay. To the west of the site are a surface parking lot and a wood frame building occupied by a local business.
3.2.1.2 City of Sausalito Zoning and Land Use Designations

City of Sausalito General Plan land use designations are intended to provide a broad description of desired uses within the City and surrounding area. The City of Sausalito zoning code identifies specific allowed uses and standards and requirements for various identified zoning districts. The project site is zoned as Public Institutional (PI); the land use designation is also Public Institutional (City of Sausalito 2003; 2012). Permitted uses on land designated as Public Institutional include Government offices and facilities. Site development requirements contained in the Sausalito Municipal Code for Public Institutional zoning districts applicable to the project site is a maximum allowable building height of 32 feet (Sausalito Municipal Code, Title 10, Chapter 10.20).

The City of Sausalito’s general plan contains objectives, policies, and implementing programs for the type and rate of development desired within the general plan area. A general plan land use objective and policy that is applicable to the project site is to provide the opportunity for moderate development and usage of facilities located on Federally-owned land by protecting and maintaining the existing Federal government facilities and encouraging additional facilities as needed. There are no policy implementation programs identified for the project site (City of Sausalito 2012).

In addition to its location within the Public Institutional zoning district, the project site is also located within the Marinship Neighborhood, which is one of eight Neighborhoods identified in the general plan. The Marinship Neighborhood, which encompasses the area east of Bridgeway Boulevard and north of Napa Street, represents the City’s only industrial and working waterfront area. A large portion of this neighborhood consists of the original buildings associated with the Marinship shipyard. According to the general plan, these buildings are an important element of the area because they are a defining characteristic unique to Sausalito.

The Marinship Specific Plan identifies planning zones, areas, parcels, and associated development programs that set forth the guidelines for permitted development within each Neighborhood. The project site is located within planning zone 2 (P-Public zone), but has not been assigned to a planning area or given a Marinship planning parcel number, nor are there specific develop programs identified for the project site (City of Sausalito 1989).

As a result of former uses of the project site, the site is currently defined by the California Department of Toxic Substances Control as a Category 4 property, which is a property where release of hazardous materials has occurred and all removal actions necessary to protect human health and the environment have been taken. Land use restrictions for Category 4 properties require that they remain as a commercial and/or industrial use – uses such as day care centers, elder care centers, hospitals, schools for persons under 21, and residences are prohibited.

Surrounding the project site, the general plan land use designations are Public Institutional to the north and west, Industrial to the east and south, and Commercial Waterfront to the northeast (City of Sausalito 2012).

3.2.1 Assessment Methods

Local zoning, land use maps, and the Sausalito General Plan were reviewed to identify zoning and land use designations assigned to the project site and surrounding area, as well as compatibility with applicable land uses and land use policies. This section evaluates the potential for construction and operation of the Proposed Action and No Action Alternative to conflict with existing surrounding land uses and land use patterns, or result in physical development that is incompatible with adjacent land uses.
3.2.2 Environmental Consequences

3.2.2.1 Proposed Action

Construction

Construction under the Proposed Action would include installation of three contiguous modular office buildings to the east of the existing Machine Shop building, stabilization and rehabilitation of the Machine Shop building, improvement of a vehicle egress driveway connecting to Marinship Way, striping for new parking stalls within existing paved areas on the north and northwest side of the site, and placement of new access gates and fencing. The existing metal storage shed located along the northeast boundary of the site would remain in place. Approximately eight trees would be removed from the eastern portion of the site to provide space to accommodate the new modular office buildings. An additional tree on the northern corner of the Machine Shop would be removed as part of the building rehabilitation. The existing fencing would be removed and replaced by new security fencing. New security gates would be installed at the site’s access points on Libertyship Way, Marinship Way, and on the site’s eastern side between the northernmost modular building and the Bay Model building.

During the estimated six-month project construction period, adjacent land uses would be subject to construction-related traffic, noise, and dust levels. Rehabilitation of the Machine Shop exterior would require removal of asbestos materials and lead-based paint. As described in Sections 3.3 (Air Quality), 3.8 (Noise), 3.12 (Solid and Hazardous Materials), and 3.13 (Transportation and Parking), the effects of these short-term activities on adjacent land uses would not be substantial. To address potential air quality effects, the VA would require the construction contractor to implement VA Specification Section 01 57 19 (Temporary Environmental Controls) and additional mitigative actions presented in Section 3.3.3.1, which include measures such as general housekeeping practices. VA Specifications Section 01 57 19 also provides guidance to reduce potential construction-related noise impacts. VA will require the contractor to comply with that guidance. Section 3.12.3.1 states that the construction contractor would be required to implement VA Specification Section 01 74 19 (Construction Waste Management) to address waste disposal. Additionally, this Environmental Assessment also provides mitigative actions based on the recommendations of the Limited Hazardous Material Sampling Survey commissioned by the VA to address asbestos and lead contamination issues at this site. Potential construction-period traffic issues that could also affect surrounding land uses would be reduced with the mitigative actions presented in Section 3.13.3.1, Transportation and Parking. The mitigative action would require the VA and construction contractor to develop a traffic control and parking plan to reduce conflicts with surrounding activities.

Therefore, with implementation of these specifications and mitigative actions, construction under the Proposed Action would not substantially conflict with existing surrounding land uses and land use patterns.

Operation

The proposed siting of the modular office buildings at this site would be consistent with the land use designation and zoning as Public Institutional, which allows Government offices and facilities and would support Sausalito’s General Plan land use objective to provide for maintenance of existing Federal Government Facilities and encouragement of additional facilities, as needed.

Implementation of the Proposed Action would not require changes in ownership, boundaries, or rights-of-way. Therefore, the Proposed Action would not encroach upon adjacent land uses and land use patterns. The new one-story modular office space would be consistent in scale with many other low-profile
buildings in the area and would meet the building height requirement contained in the Sausalito Municipal Code for PI zoning districts; the building’s design and color would be consistent with many other buildings in the area and would not be visually obtrusive. Therefore, the Proposed Action would not conflict with existing surrounding land uses and land use patterns, or result in physical development that is incompatible with adjacent Public Institutional, Industrial, and Commercial land uses. Proposed rehabilitation of the exterior of a historic property that was one of the original buildings associated with Marinship shipyard operations would be a long-term moderate beneficial effect on land use in that it would improve the visual quality of the site and support City’s goal to retain the original buildings associated with the shipyard.

The former Machine Shop and the storage shed would remain vacant and unused; however, occupancy and use of the proposed modular office space by VA office and administrative personnel would increase the number people present on site during work hours by up to 75 individuals. Although the operational traffic analysis presented in Section 3.13.3.1 found that additional volumes would not have an adverse effect on local traffic circulation and flow, it found that the Proposed Action could have a potential adverse effect on site parking. To that end, a mitigative action is proposed to address the long-term parking impact at the site and the neighboring Bay Model. The mitigative action requires the VA and Corps to develop a shared parking agreement utilizing existing lots on both properties. With implementation, it is anticipated that sufficient parking would be available so as not to affect parking on adjacent streets and neighboring sites. Therefore, the Proposed Action would not have an adverse effect on surrounding land uses.

3.2.2.2 No Action Alternative

Under this alternative, none of the physical changes to the project site under the Proposed Action would occur. Therefore, no short-term effects on adjacent land uses typical of construction activities would occur. In addition, no changes in site use would occur. Therefore, the No Action Alternative would not result in construction or operation-related short- and long-term effects on land uses. However, because the historic Machine Shop would not be rehabilitated under the No Action Alternative, the beneficial land use effect that would result from the Proposed Action would not occur.
3.3 Air Quality

IMPACTS

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ATTRIBUTES

☐ CARBON MONOXIDE  ☒ PRESENCE OF ODORS
☐ PHOTOCHEMICAL OXIDANTS  ☒ PARTICULATE EMISSIONS
☐ NITROGEN OXIDES  ☒ HYDROCARBONS
☒ OCCURS IN AN AIR QUALITY MAINTENANCE AREA (AQMA)  ☒ SULFUR OXIDES
☒ ADVERSE  ☒ SHORT TERM
☐ BENEFICIAL  ☐ LONG TERM

3.3.1 Affected Environment

The project site is located within the San Francisco Bay Area Air Basin (Air Basin). Air quality in the Air Basin is regulated at the Federal level by the U.S. Environmental Protection Agency (U.S. EPA), at the state level by the California Air Resources Board (CARB), and at the local level by the Bay Area Air Quality Management District (BAAQMD). Each of these agencies develops rules, regulations, and policies to comply with applicable legislation. Although the U.S. EPA regulations may not be superseded, both state and local regulations can be, and are often, more stringent.

3.3.1.1 National and State Air Quality Standards

The Federal and California Clean Air Acts have established ambient air quality standards for different pollutants. National Ambient Air Quality Standards (NAAQS) are established by the Federal Clean Air Act for six criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM10 and PM2.5), and lead.

Pollutants regulated under the California Clean Air Act are similar to those regulated under the Federal act. In many cases, the California Ambient Air Quality Standards (CAAAQS) are more stringent than the corresponding Federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. Both the U.S. EPA and the CARB review ambient air quality standards on a regular basis and make necessary adjustments in response to updated scientific information. Federal and state ambient air quality standards are shown in Table 3.3-1 on the following page.
### Table 3.3-1 Relevant National and State Ambient Air Quality Standards

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<td>Nonattainment</td>
<td>0.070 ppm (137 µg/m³)</td>
<td>Nonattainment</td>
</tr>
<tr>
<td></td>
<td>1-hour</td>
<td>None</td>
<td>— (a)</td>
<td>0.09 ppm (180 µg/m³)</td>
<td>Nonattainment</td>
</tr>
<tr>
<td><strong>Carbon Monoxide</strong></td>
<td>1-hour</td>
<td>35 ppm (40 mg/m³)</td>
<td>Attainment</td>
<td>20 ppm (23 mg/m³)</td>
<td>Attainment / Maintenance</td>
</tr>
<tr>
<td></td>
<td>8-hour</td>
<td>9 ppm (10 mg/m³)</td>
<td>Attainment</td>
<td>9.0 ppm (10 mg/m³)</td>
<td>Attainment / Maintenance</td>
</tr>
<tr>
<td><strong>Nitrogen Dioxide</strong></td>
<td>1-hour</td>
<td>0.100 ppm (188 µg/m³)</td>
<td>Unclassified</td>
<td>0.18 ppm (339 µg/m³)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.053 ppm (100 µg/m³)</td>
<td>Attainment</td>
<td>0.030 ppm (57 µg/m³)</td>
<td>Status not reported</td>
</tr>
<tr>
<td><strong>Sulfur Dioxide</strong></td>
<td>1-hour</td>
<td>0.075 ppm (196 µg/m³)</td>
<td>Attainment</td>
<td>0.25 ppm (655 µg/m³)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>0.14 ppm (365 µg/m³)</td>
<td>Attainment</td>
<td>0.04 ppm (105 µg/m³)</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>0.03 ppm (56 µg/m³)</td>
<td>Attainment</td>
<td>None</td>
<td>— (b)</td>
</tr>
<tr>
<td><strong>Respirable Particulate Matter (PM₁₀)</strong></td>
<td>24-hour</td>
<td>150 µg/m³</td>
<td>Unclassified</td>
<td>50 µg/m³</td>
<td>Nonattainment</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>None</td>
<td>— (b)</td>
<td>20 µg/m³</td>
<td>Nonattainment</td>
</tr>
<tr>
<td><strong>Fine Particulate Matter (PM₂.₅)</strong></td>
<td>24-hour</td>
<td>35 µg/m³</td>
<td>Nonattainment</td>
<td>None</td>
<td>— (b)</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>15 µg/m³</td>
<td>Attainment</td>
<td>12 µg/m³</td>
<td>Nonattainment</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>30-day average</td>
<td>1.5 µg/m³</td>
<td>Not specified</td>
<td>None</td>
<td>— (b)</td>
</tr>
<tr>
<td></td>
<td>Calendar quarter</td>
<td>None</td>
<td>— (b)</td>
<td>1.5 µg/m³</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Rolling 3 month average</td>
<td>None</td>
<td>— (b)</td>
<td>0.15 µg/m³</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

**Notes:**
- ppm = parts per million
- mg/m³ = milligrams per cubic meter
- µg/m³ = micrograms per cubic meter
- (a) The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
- (b) No applicable standard.

Source: BAAQMD 2014
3.3.1.2 Attainment Status of the San Francisco Bay Area Air Basin

The determination of whether a region’s air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to the Federal and state standards. Both the U.S. EPA and CARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria pollutants.

The attainment status of the Air Basin for each NAAQS and CAAQS is shown in Table 3.3-1. At the Federal level, the Air Basin is listed as a nonattainment area for the 8-hour ozone standard and the PM$_{2.5}$ 24-hour standard. The Air Basin is listed as an attainment/maintenance area for the Federal carbon monoxide standards, in attainment for the nitrogen dioxide annual standard, the sulfur dioxide standards, and the PM$_{2.5}$ annual standard, and unclassified for the nitrogen dioxide 1-hour standard and the PM$_{10}$ 24-hour standard.

At the state level, the Air Basin is listed as a nonattainment area for the 1-hour and 8-hour ozone standard, the PM$_{10}$ 24-hour and annual standards, and the PM$_{2.5}$ annual standard. The Air Basin is listed as in attainment for the state standards on carbon monoxide, nitrogen dioxide, and sulfur dioxide.

3.3.1.3 General Conformity Requirements

General conformity requirements were adopted as part of the Federal Clean Air Act Amendments and were implemented by U.S. EPA regulations posted in the Federal Register on November 30, 1993 (40 CFR Sections 6, 51, and 93: "Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule"). The purpose of the general conformity program is to ensure that actions taken by the Federal government do not undermine state or local efforts to achieve and maintain NAAQS. If it is found that an action would create emissions above de minimis threshold levels specified in U.S. EPA regulations, or if the activity is considered regionally significant because its emissions exceed 10 percent of an area’s total emissions, the action cannot proceed unless mitigation measures are specified that would bring the project into conformance.

General conformity applies in both federal nonattainment and maintenance areas. As summarized above, the Air Basin is listed as a federal attainment/maintenance area for carbon monoxide standards, and a nonattainment area for 8-hour ozone and 24-hour PM$_{2.5}$. Therefore, the general conformity rule is applicable to the Proposed Action for emissions of carbon monoxide, ozone precursors (volatile organic compounds and nitrogen oxides), and PM$_{2.5}$. The applicable general conformity de minimis thresholds are shown in Table 3.3-2.

Table 3.3-2 General Conformity De Minimis Levels

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Threshold (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide</td>
<td>100 (a)</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>50 (b)</td>
</tr>
<tr>
<td>Nitrogen Oxides</td>
<td>100 (b)</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>100 (c)</td>
</tr>
</tbody>
</table>

Source: 40 CFR 93

Notes:
(a) Applicable emission threshold in maintenance areas.
(b) Applicable emission threshold in nonattainment areas.
(c) Applicable emission threshold for PM$_{10}$. There is currently no threshold for PM$_{2.5}$.
3.3.1.4 Climate Change and Greenhouse Gas Emissions

In December 2014, the Council on Environmental Quality (CEQ) issued draft guidance to provide Federal agencies direction on when and how to consider the effects of greenhouse gas (GHG) emissions and climate change in their evaluation of all proposed federal actions. The guidance provides that the analysis should be proportionate to the effects of the Proposed Action. An agency should consider the potential effects of a Proposed Action on climate change as indicated by its GHG emissions and the implications of climate change for the environmental effects of a Proposed Action. An analysis may be quantitative or qualitative. In considering when to disclose project quantitative GHG emissions, CEQ provides a reference point of 25,000 metric tons of carbon dioxide equivalents (CO2e) per year, below which a GHG emissions quantitative analysis is not warranted (unless quantification below that reference point is easily accomplished).

3.3.2 Assessment Methods

The air quality impact analysis considers construction and operational impacts associated with the Proposed Action. Air quality impacts are assessed with respect to whether or not the Proposed Action would result in a cumulatively considerable net increase of nonattainment pollutants or their precursors as measured against the U.S. EPA general conformity de minimis thresholds. The air quality assessment also includes a qualitative analysis of the potential for the Proposed Action to generate GHG emissions that may have a substantial adverse effect on the environment, and the potential to create objectionable odors affecting a substantial number of people.

3.3.3 Environmental Consequences

3.3.3.1 Proposed Action

Construction

The types of air pollutants generated by construction activities expected for the Proposed Action are typically nitrogen oxides and particulate matter, such as dust and exhaust. Potential impacts would be minimized by implementing the requirements for protection of air resources outlined in the VA Specification Section 01 57 19 (Temporary Environmental Controls). These include compliance with federal air quality regulations and standards through implementation of measures to control dust particles and particulates, and controlling carbon monoxide emissions from construction equipment.

According to the San Francisco Bay Area 2001 Ozone Attainment Plan (submitted to the U.S. EPA for review), both on-site construction equipment and haul trucks are included in their inventory of summer time emissions. Therefore, ozone precursor emissions from construction activities are included in the emission inventory that is the basis for regional air quality plans. Since construction activities are already included in the 2001 Ozone Attainment Plan, the construction of the Proposed Action is not expected to impede attainment or maintenance of ozone standards in the Bay Area (BAAQMD 2010). A conformity analysis was not deemed necessary because construction activities are relatively minor and would not result in emissions that would exceed the Federal de minimis levels.

Despite this, construction activities from the Proposed Action would increase dust fall locally and elevated levels of PM_{2.5} and PM_{10} downwind of construction activity, especially from demolition activities. These are temporary emissions that vary considerably from day-to-day and by the type of equipment, soil types, and weather. The application of basic construction measures and additional measures to reduce
demolition fugitive dust presented in mitigative actions below can reasonably reduce PM$_{2.5}$ and PM$_{10}$ emissions during construction to have a minimal effect on air quality.

Construction activities would result in a temporary increase in GHG emissions, including exhaust emissions from on-road haul trucks, worker commute vehicles, and off-road heavy duty equipment. Project emissions during construction would not be a considerable contribution to the cumulative GHG impact, given that construction would be temporary and would not require a large fleet of earthmoving equipment and soil off hauling.

Construction activities could result in short-term odors, such as diesel exhaust from construction equipment. Such odors would be temporary, occurring only during the construction period, and would disperse rapidly. Therefore, construction of projects under the Proposed Action would not create objectionable odors affecting a substantial number of people.

**Mitigative Actions – Air Quality:** Construction contractors shall take measures to minimize fugitive dust, diesel exhaust, and dirt emissions resulting from construction. At a minimum, construction contractors shall undertake the following BAAQMD standard mitigation requirements measures, as applicable, to minimize any adverse effects:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD’s phone number shall also be visible to ensure compliance with applicable regulations.

**Operation**

The Proposed Action would not induce population growth or development either directly or indirectly and, therefore, would not generate emissions beyond those accounted for in the 2001 Ozone Attainment Plan. Operation of the Proposed Action would relocate approximately 75 employees from the SFVAMC campus to the project site, a distance of approximately 8.0 miles. The Proposed Action would modify existing trips, but it would not generate new trips. Depending on where the employees live, some trips are expected to
be shortened, while others may increase. Overall, changes to existing emissions from worker trips are expected to be negligible. The Proposed Action does not include any new stationary sources of note, such as a generator. Because little would change with regard to vehicle trips, and there would be no new stationary sources, the Proposed Action would not appreciably increase existing air quality or GHG emissions generated under current conditions.

Implementation of the Proposed Action would not result in a new source of odors (e.g., wastewater treatment plants, landfills, compost facilities, petroleum refineries, food processing facilities, confined animal facilities). Therefore, the Proposed Action would not create objectionable odors affecting a substantial number of people.

### 3.3.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the site proposed under the Proposed Action would occur. Therefore, no additional short-term increases in PM$_{2.5}$, PM$_{10}$, or other emissions typical of construction activities would occur. This alternative would not result in new or adverse construction or operation-related effects on air quality.
3.4 Cultural Resources

IMPACTS

S = Severe, M = Moderate, MI = Minimal, N = None

3.4.1 Affected Environment

This section describes the regulatory, physical, and historical setting related to cultural resources, and describes how the VA, as a Federal Agency, has addressed its obligations under the National Historic Preservation Act (NHPA).

Section 106 of the NHPA and its implementing regulations (Title 36 CFR Part 800) require that Federal agencies take into account the effects of their actions (referred to as “undertakings” under Section 106) on properties that may be eligible for or listed in the National Register of Historic Places (NRHP), and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment.

Under 36 CFR 800.3(a) a Federal agency must first determine whether the Proposed Action is an undertaking as defined in § 800.16(y) and, if so, whether it is a type of activity that has the potential to cause effects on historic properties. The VA, in consultation with the State Historic Preservation Officer (SHPO), has determined that the Proposed Action is an undertaking that has the potential to cause effects on historic properties (Office of Historic Preservation 2014).

Under the National Environmental Policy Act (NEPA) the VA must also address potential impacts to “cultural resources”, which under NEPA includes a wider range of resources than “historic properties,” such as archaeological sites not that do not meet the definition of historic properties.

Once a Federal Agency has determined that a proposed action is the type of activity that has the potential to cause an effect on historic properties, the agency must determine and document the area of potential effects (APE), as defined in §800.16(d). The agency’s project cannot proceed until concurrence is received from SHPO.

3.4.1.1 Area of Potential Effect

The APE for archaeological resources has both a horizontal and vertical component. The VA has determined that the APE for this proposed action is the entire 1.3-acre project site (the horizontal APE), as shown in Figure 3 Project Site, plus immediately adjacent properties, to a depth of 12 inches (the vertical APE) where direct effects from project construction could occur. Indirect effects (i.e., vandalism of archaeological resources due to opening the area to public use or exposure) are not anticipated because
after completion of construction, all ground surfaces on the project (except for existing tree locations) would be paved or covered with buildings. The VA is seeking SHPO concurrence with this determination.

The next step is to identify any historic properties located within the APE for archaeological and historic architectural resources.

### 3.4.1.2 Cultural Resource Identification

Identification of cultural resources was accomplished through research and reviews of existing information, including a records search by the Northwest Information Center (NWIC) of the California Historical Resources Information System. The NWIC records search results indicate that between 1980 and 2014, 14 cultural resources studies have been conducted within a 0.5-mile radius of the project site. These studies resulted in the recordation of three historic resources, including the Napa Street Pier, the Locus Street Pump Station, and Arques Shipyard and Marina; and two prehistoric archaeological resources, including a habitation site (CA-MRN-3), first recorded in 1909, and a concentration of displaced cultural soil from CA-MRN-3 (P-21-002670), both located about 0.5 mile from the project site (NWIC 2015).

One of the studies encompassed the project site (NWIC 2015). This study, which is entitled “Cultural Resources Investigation of Operating Projects, Corps of Engineers Base Yard Facility, Sausalito” was undertaken in 1980 by the U.S. Army Corps of Engineers (Corps) in support of NHPA compliance (Brandt 1980). The report concludes that as a result of a literature search and on-site reconnaissance, it has been determined that no prehistoric cultural resources are present on or immediately adjacent to Corps property at the base yard in Sausalito. It further states that it is unlikely that sub-surface disturbance or construction would uncover evidence of prehistoric occupation at the base yard since the original shipyard was built in fill overlying the natural marsh and mud-flat physiography. The report recommends, however, that the Corps undertake investigation into the architectural, structural, and socio-cultural history of the base yard for possible consideration for nomination to the NRHP.

Review of historical literature and maps indicate that portions of the APE were developed as early as 1909 by the Northwestern Pacific (NWP) railroad with an electrical shop building and a railroad spur (Sanborn Library 1909). Subsequently, beginning in 1942, the site was developed as part of the Corps Marinship Shipyard Complex. In April 1942, adjacent Pine Point was dynamited and the 838,763 cubic yards of resulting debris used to fill in the tidal marshes between what is now Bridgeway Boulevard and the former railroad embankment, including the project site, to create land on which the various buildings of the shipyard were constructed. The abandoned NWP railroad facilities were demolished (Finnie 1947), although, rails remaining from the site’s active days as a part of the Marinship operation are found in the pavement on the northeast portion of the site. After placement of fill, the project site was developed with an approximately 25,000-square-foot building that was used as a Machine Shop for the Marinship shipyard between approximately 1942 and 1945, and later by the Corps as the South Pacific Division Laboratory between 1950 and 1997. A storage shed (“Butler building”) was installed circa 1948 along the east boundary of the project site, for use by the Corps. More recently, this building has been vacant and occupied at various times by squatters or homeless individuals. According to an evaluation of historic resources conducted for the whole Machine Shop property, this shed was found not to be eligible for NRHP listing due to commonality of design and a lack of association with events or persons (Advanced Design Consultants undated).

Literature review also indicates that the former Machine Shop has been determined to be individually eligible for listing in the NRHP through consensus with the SHPO. It has been further determined that the
Machine Shop is most likely a contributing element to an as yet unevaluated historic district (SHPO 2014). The Machine Shop is eligible for NRHP listing for its association and affiliation with several historic contexts during a period of significance between May 1942 and September 1946 (Office of Historic Preservation 2011). A National Register Nomination for the Machine Shop and for the Marinship Historic District was prepared in 2013 and remains under consideration by the VA’s Historic Preservation Officer.

To further identify the existing conditions within the APE, a records search request was submitted to the Native American Heritage Commission (NAHC) on January 21, 2015, to determine if there is record of any Native American cultural resources on or in the vicinity of the project site in their sacred lands database. The NAHC response was received on February 27, 2015, and indicated that the search of the sacred lands database did not identify any known sacred lands on or in the immediate vicinity of the project site. On May 14, 2015, a response was received from the Federated Indians of the Graton Rancheria requesting additional project information and direct contact from the Federal lead agency to initiate Section 106 consultation. As of the date of this document, no further action has been taken.

Because the entire project site consists of artificial fill over tidal marshlands, the potential for the presence of intact prehistoric-period archaeological resources within the archaeological resources APE is considered extremely unlikely. However, there is likelihood for the presence of the historic-period archaeological resources associated with the NWP railroad and the later use of the site by the Corps. The SHPO concurred with the VA that the proposed project site appears to be archaeologically sensitive (Office of Historic Preservation 2011).

### 3.4.2 Assessment Methods

Potential effects on archaeological and historic architectural resources were assessed by evaluating the potential effect of the Proposed Action on historic properties pursuant to Section 106 of the NHPA. The VA has initiated consultation with the SHPO and the ACHP for the Proposed Action; consultation is ongoing.

The assessment of potential effects on other cultural resources was based on the potential for construction-related ground disturbance and/or excavation and site use to disturb or destroy known and previously unrecorded archaeological resources or sacred sites that do not meet the definition of historic properties.

### 3.4.3 Environmental Consequences

#### 3.4.3.1 Proposed Action

**Construction and Operation**

**Archaeological and Other Cultural Resources**

The subject site is comprised of entirely of filled and developed lands, upon which the Machine Shop has been constructed. No known eligible archaeological sites are located within or adjacent to the site. As noted in this document, the site has been created by fill from other areas of Sausalito. As this occurred in the early 1940s during wartime activities, it is doubtful that the fill material had been screened for potential archaeological resources. Therefore, it is possible that unanticipated archaeological finds could occur during excavation and other activities disturbing the subsurface.

The VA is currently developing plans for conducting archaeological testing as necessary, in consultation with the SHPO, the Federated Indians of Graton Rancheria, the City of Sausalito and other interested
parties (Department of Veterans Affairs, 2014b) to identify any archaeological resources within the archaeological APE. As noted above, the agency’s project cannot proceed until concurrence is received from SHPO. In conjunction with these plans, to minimize potential adverse effects on archaeological resources during construction, the VA will institute the following mitigative actions:

**Mitigative Action – Treatment of Unanticipated Finds**

The VA shall retain a qualified archaeologist meeting the Secretary of Interior's Professional Qualification Standards for Archaeology to be present during ground disturbing activities that may affect archaeological or historical materials. In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, shall occur.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the Proposed Action, ground disturbances in the area of the find shall be halted and the qualified professional archaeologist shall be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the evaluation criteria of the NHPA and shall develop appropriate mitigation. If human remains are encountered, the County Coroner shall be notified immediately upon their discovery. If the coroner determines that the remains are of Native American origin, the provisions of Native American Graves Protection and Repatriation Act (NAGPRA) shall apply.

**Mitigative Action – Execution of SHPO Concurrence Requirements**

On May 7, 2015, the VA “reinitiated” consultation with SHPO on this property to seek concurrence with the Proposed Action. Should the SHPO concur with the VA’s Proposed Action, the VA shall execute the SHPO’s recommendations with regard to the action, as well as consider comments from all interested parties issued during this process. This could include, but not be limited to, treatment of archaeological materials, specifications for the structure’s siding material, materials to replace fenestration detail, etc. This mitigative action shall be revised in the project record and construction documents to reflect these potential recommendations.

Implementation of these management measures would reduce potentially adverse impacts of the Proposed Action resulting from inadvertent damage or destruction of presently undocumented archaeological resources and human remains during construction. Therefore, no significant adverse impact on archaeological resources would be expected.

**Historic Architectural Resources**

As noted above, the literature review conducted for this analysis indicates that the former Machine Shop is individually eligible for listing in the NRHP for its association and affiliation with several historic contexts during a period of significance between May 1942 and September 1946 (Office of Historic Preservation 2011). A National Register Nomination for the Machine Shop and for the Marinship Historic District was prepared in 2013 and remains under consideration by the VA’s Historic Preservation Officer.

As stated in Section 1.3, Purpose and Need, the VA intends to stabilize and rehabilitate the Machine Shop. The VA is in consultation with the SHPO to ensure that the Proposed Action would meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. To minimize potential adverse effects on archaeological resources during construction, the VA will institute the following mitigative actions:
**Mitigative Action – Execution of SHPO Concurrence Requirements**

Please refer to the analysis of potential archaeological impacts immediately preceding this analysis for the full text of the mitigative action.

Implementation of this mitigative action would reduce potentially adverse impacts of the Proposed Action resulting to this National Register-eligible property. Indeed, it is the purpose of the Proposed Action to preserve the Machine Shop, its integrity, and that of the surrounding area. Therefore, no significant adverse impact on historic architectural resources would be expected.

**3.4.3.2 No Action Alternative**

Under the No Action Alternative, none of the changes to the project site proposed under the Proposed Action would occur. Therefore, no construction-related ground disturbance that could encounter unanticipated and unknown cultural resources would occur. In addition, no stabilization and rehabilitation activities would occur that would halt the deterioration of the existing structure eligible for listing in the NRHP (i.e., Machine Shop).
3.5  Geology and Soils

IMPACTS

S  M  MI  N
☐  ☐  ☒  ☐

ATTRIBUTES

☐ ROCK EXCAVATION  ☒ SOIL EROSION
☐ CUT / FILL OPERATIONS  ☐ SOIL COMPACTION
☐ GRADING  ☐ SOIL HORIZON REMOVAL/MIXING
☒ ADVERSE  ☐ LONG TERM
☐ BENEFICIAL  ☒ SHORT TERM
☐ CUMULATIVE

3.5.1  Affected Environment

3.5.1.1 Regional Seismicity

The subject site is located within a region of active faulting and high seismicity associated with the San Andreas Fault system. The San Andreas Fault system is a zone of major, northwest-trending active strike-slip faults, including the Northern San Gregorio, San Andreas, Hayward, and Calaveras faults. The active faults nearest to the subject site are the San Andreas Fault, approximately 7 miles to the west, and the Hayward Fault, approximately 12 miles to the east. Other smaller local faults located near the subject site include the Point Reyes and Burdell Mountain faults. The subject site is not located within an Earthquake Fault Zone as defined by California’s Alquist-Priolo Earthquake Fault Zoning Act, which is a regulatory zone (generally 50 feet) around active faults in which structures for human occupancy cannot be placed (CDC, California Division of Mines and Geology 1974).

The San Andreas Fault system has been the source of numerous moderate to large magnitude historical earthquakes that have caused strong ground shaking in the Bay Area, including the 1906 San Francisco and 1989 Loma Prieta earthquakes. Recent studies by the United States Geological Survey (USGS) indicate that there is a 63 percent likelihood of a magnitude 6.7 or higher earthquake occurring in the Bay Area in the next 30 years, with a 21 percent chance of such an earthquake occurring on the northern San Andreas fault, and a 31 percent chance on the Hayward fault (USGS 2008).

The Modified Mercalli (MM) intensity scale is commonly used to measure earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total). According to mapping compiled by the Association of Bay Area Governments (ABAG), a major seismic event on either the San Andreas or Hayward fault could cause strong (Modified Mercalli VII) to very strong (Modified Mercalli VIII) ground shaking at the site (ABAG 2010).

3.5.1.2 Site Geology and Soils

According to a Geotechnical Investigation prepared for the site in 2010 (TRC 2010), the subject site is underlain by up to 40 feet of Bay Mud as the entire site was backfilled in the early 1940’s from the pre-existing shoreline to railroad line. It previously had all been tidal marshlands.
According to the Natural Resources Conservation Service, the subject site is underlain by the Tocaloma-McMullin-Urban land complex (15 to 30 percent slopes) and the Urban land-Xerorthents complex (0 to 9 percent slopes). According to the 2010 Geotechnical Report, a Plasticity Index (PI) test on the fill soil at a depth of 4 feet exhibited a PI of 16, indicating the fill material has low to moderate plasticity and expansion potential. Below the fill, alternating layers of stiff to very still lean clays with varying amounts of sand and gravel and medium dense to very dense sands and gravels were present to a depth of approximately 44.5 feet.

In 1998, the USGS released a preliminary map and geographic information system (GIS) database that provides a summary of the distribution of landslides evident in the landscape of the San Francisco Bay region (USGS 1997). According to the mapping, the project site is located in an area mapped as flat land, which is defined as areas of gentle slope at low elevation that have little or no potential for the formation of slumps, transitional slides, or earth flows except along stream banks or terrace margins.

The USGS also classifies liquefaction susceptibility into five categories ranging from very low to very high. According to mapping, the project site is located in an area not mapped for liquefaction susceptibility (USGS 2006). The 2010 Geotechnical Report concluded that there is a likely potential for localized liquefaction during a major earthquake in sand strata located at various depths between approximately 5.0 to 57.5 feet. If a large earthquake were to occur, liquefied soils could result in relatively large ground settlement, loss of bearing capacity for structures founded on shallow foundations, and lateral spreading.

### 3.5.2 Assessment Methods

Regional and local geologic maps and reports were reviewed to identify geologic conditions and geologic hazards in the study area that, because of their proximity, could directly or indirectly affect the Proposed Action or No Action Alternative. Construction-related impacts evaluated include the potential for construction activities to cause soil erosion and/or loss of topsoil. Operation-related impacts evaluated include those related to new modular buildings siting and design, including the potential for seismic related ground failure and unstable soils.

### 3.5.3 Environmental Consequences

#### 3.5.3.1 Proposed Action

**Construction**

**Soil Erosion**

Construction activities would result in the disturbance of soils at the project site as underground utility lines and connections (i.e., water, sanitary sewer) would be installed, as well as a maximum of 12 inches of excavation for the modular building foundation. Additionally, clearing and grubbing associated with tree removal on the site would temporarily expose soils. Exceptions to this would be the exterior rehabilitation of the Machine Shop and placement of the modular buildings on structural slabs, which would not disturb surface soils.

Potential adverse effects related to soil erosion would be minimized by implementing the requirements for protection of water resources outlined in the VA Specification Section 01 57 19, *Temporary Environmental Controls*. These requirements include such measures as setting work area limits, reducing exposure of unprotected soils, protecting disturbed areas, installing erosion and sediment control devices, hazardous material spill prevention measures, managing spoil areas, and following good housekeeping procedures.
The project site is approximately 1.3 acres in size and the potential area of ground disturbance would be much less than that; therefore, a Stormwater Pollution Prevention Plan pursuant to the National Pollution Discharge Elimination System (NPDES) would not be required. Compliance with VA Specification Section 015719, Temporary Environmental Controls under the Proposed Action would not result in an adverse environmental impact relative to soil erosion.

**Loss of Topsoil**

The project site has been highly altered from its original natural state and is located near areas of moderate to intense urban uses, such as surface streets, parking lots, and recreational and commercial facilities with little or no topsoil or native soil remaining. As a result, construction under the Proposed Action would result in little disturbance to native soils and a substantial loss of topsoil is not anticipated.

**Operation**

**Seismic Ground Shaking**

As discussed in Section 3.5.1, the subject site is located within a region of active faulting and high seismicity associated with the San Andreas Fault and Hayward Fault systems. Strong to very strong ground shaking can damage foundations and other structural elements, which can lead to damage or collapse, falling objects endangering people and structures, and creation of general ground instability undermining or weakening structures.

If near-surface soils vary in composition both vertically and laterally, strong earthquake shaking can cause non-uniform densification of loose to medium dense cohesionless soil strata. This results in movement of the near-surface soils. The 2010 Geotechnical Report did not encounter any loose to medium dense cohesionless soils above the design ground water depth of 5 feet. Therefore, the probability of significant differential settlement of non-saturated sand layers at the subject was determined to be low.

As summarized in Section 2.2 (Proposed Action), the exterior rehabilitation of the Machine Shop and installation of three new modular buildings are proposed under the Proposed Action. The design and implementation of each would be required to comply with the VA's Seismic Design Requirements H-18-8 and the latest edition of the California Building Code. The VA Seismic Design Requirements would require geologic hazard reports on the Machine Shop exterior rehabilitation, as well as site-specific ground-response reports, which would include an assessment of the nature of the modular building sites and the potential for earthquake damage based on regional and site geology, subsurface conditions, and seismic shaking potential. This would include estimates of the peak ground accelerations that could occur at the site, and evaluation of liquefaction and settlement potential, as well as detailed characterization of earthquake ground motions for the site to be used in design. The VA Seismic Design Requirements also require that foundations and other improvements (i.e., roads, driveways, utilities) be designed based on site-specific soil investigations to ensure the suitability of the subsurface materials for adequately supporting the proposed structures. While conformance to the Seismic Design Requirements and building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake, it is reasonable to expect that a well-designed and well-constructed structure would not collapse or cause loss of life in a major earthquake. Therefore, the Proposed Action is not anticipated to expose people or structures to substantial adverse effects related to seismic ground shaking.
Seismic-Related Ground Failure and Unstable Geologic Units

Slope steepness is generally the dominant factor governing slope stability, along with drainage and soil and bedrock conditions. Given the generally flat topography of the project site, development under the Proposed Action would have a low susceptibility to landslides, lateral spreading or other types of failures.

Section 3.5.1 summarizes the geologic units and soils that have been mapped as underlying the subject site. As noted above, the 2010 Geotechnical Report concluded that there is a likely potential for localized liquefaction during a major earthquake in sand strata located at various depths between approximately 5.0 to 57.5 feet. If a large earthquake were to occur, liquefied soils could result in relatively large ground settlement, loss of bearing capacity for structures founded on shallow foundations, and lateral spreading. As summarized above, the design and construction of projects under the Proposed Action would be required to comply with the VA’s Seismic Design Requirements H-18-8 and the latest edition of the California Building Code. This would include evaluation of liquefaction and settlement potential, as well as detailed characterization of earthquake ground motions for the site to be used in design. The VA Seismic Design Requirements also require that foundations and other improvements (i.e., roads, driveways, utilities) be designed based on site-specific soil investigations to ensure the suitability of the subsurface materials for adequately supporting the proposed structures. Therefore, through compliance with these requirements and regulations, the Proposed Action would not expose people or structures to substantial adverse effects related to seismic related ground failure and unstable soils.

Expansive Soils

As noted previously in the 2010 Geotechnical Report, a PI test on the fill soil at a depth of 4 feet exhibited a PI of 16, indicating the fill material has low to moderate plasticity and expansion potential. A soil PI of greater than 20 is considered expansive, and greater than 40 can generally be considered highly expansive (Green 2005). Because the PI index of the project site fill soils is less than 20 PI, it is not considered to be expansive. Therefore, the Proposed Action would not be adverse affected by expansive soil creating substantial risks to life or property.

3.5.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the project site under the Proposed Action would occur. Therefore, this alternative would not result in new construction or operation-related effects on geology and soils. The Machine Shop’s exterior would not be rehabilitated and the modular buildings would not be constructed. The Machine Shop would continue to be in a state of disrepair and select administrative and office space would remain at the SFVAMC campus in San Francisco. Therefore, the No Action Alternative would not have any beneficial effects.
3.6 Hydrology and Water Quality

IMPACTS

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>MI</th>
<th>N</th>
</tr>
</thead>
</table>

ATTRIBUTES

- ☑ POTENTIAL FOR EROSION AND/OR SEDIMENTATION (NPDES)
- ☑ POTENTIAL FOR CONTAMINATION OF WATER REGIME (FROM HAZARDOUS / TOXIC WASTES)
- ☑ ALTERATION / QUALITY CHANGE OF SURFACE WATER DRAINAGE
- ☑ ALTERATION / QUALITY CHANGE OF GROUND WATER REGIME
- ☑ LONG TERM
- ☑ SHORT TERM
- ☑ CUMULATIVE

3.6.1 Affected Environment

3.6.1.1 Climate and Precipitation

The City of Sausalito has a "Mediterranean" climate. Unlike warmer inland areas, the city is subject to higher winds and cooler temperatures due to its location on the San Francisco Bay. Offshore breeze and fog serve to moderate temperature and the city does not usually experience extreme cold temperatures. The area experiences cool, wet winters and warm, dry summers. Average highs in Sausalito are usually between 60 and 70 degrees Fahrenheit (°F), with the hottest month of the year being September, with an average high of 70°F. Average lows run from the mid-40s to mid-50s°F, with the coldest months being December and January with an average temperature of 46°F. Average annual rainfall for the region is approximately 25.0 inches per year, and the annual mean temperature is 59°F.

3.6.1.2 Surface Water Hydrology and Water Quality

The project site is within an industrial waterfront immediately along the west shore of Richardson Bay and the greater San Francisco Bay. The site is relatively level and storm water drains away from the existing Machine Shop to existing storm drain inlets north and east of the structure. These inlets access two underground storm drains running along the north and south sides of the site – an 18-inch conduit on the north between the structure and the Bay Model building and a 66-inch conduit in Libertyship Way on the south. These drains flow into Richardson Bay.

3.6.1.3 Local Groundwater Conditions

The site is composed of Bay Mud overlain by imported fill. The California Department of Water Resources (DWR) Bulletin 118 series presents the results of groundwater basin evaluations performed throughout California. The VA Sausalito Annex is not located within an identified Groundwater Basin. The closest basis is the Ross Valley Groundwater Basin (2-28) located across Corte Madera and Larkspur to the north. The site is not associated with basins identified in the DWR’s Sustainable Groundwater Management (SGM) Program.
### Local Water Quality

Richardson Bay is the closest water body to the site, immediately adjacent to its east. The Marin County watershed map does not show streams or other water features at the site. This has been verified through numerous site visits. Richardson Bay is a part of San Francisco Bay, located just northeast of the Golden Gate Bridge in southern Marin County. Water quality in the area is regulated under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). The SFBRWQCB Water Quality Control Plan (Basin Plan) identifies beneficial uses for surface waters in Richardson Bay area. The existing beneficial uses of Richardson Bay include recreational activities including boating, kayaking, rowing, and swimming. As Richardson Bay is protected from strong tides and winds by the Marin Headlands and Tiburon Peninsula, it provides shelter for sea birds and migratory waterfowl during the winter months. Richardson Bay provides habitat and refuge for harbor seals, spawning grounds for herring, and important spawning and feeding areas for other fishes, including year-round residents, migrating anadromous fish, and pelagic ocean visitors (SWRCB, 2009).

Richardson Bay is listed as impaired under Section 303(d) of the Federal Clean Water Act resulting from high coliform bacteria levels. Monitoring results indicate that Richardson Bay exceeds bacteria water quality objectives that protect the beneficial uses of shellfish harvesting (SHELL) and water contact recreation (REC1). The inclusion of Richardson Bay on the 303(d) list requires that a plan be developed to control the total maximum daily load (TMDL) of pollution and to ensure that all beneficial uses are protected (SWRCB, 2009). A pathogen TMDL was adopted by the SFBRWQCB in December 2009. Richardson Bay has been listed as a federal No Discharge Zone for vessel sewage waste since 1979. (SFBRWQCB, 2011).

The SFWRWQCB also reports residual intertidal and sub tidal sediment contamination from boat building activities during World War II along the Sausalito waterfront in Richardson Bay (SFBRWQCB, 2011).

### Assessment Methods

Regional documents and maps were reviewed to identify hydrologic conditions and resources that could be directly or indirectly affected by construction or operation of the Proposed Action. The analysis focuses on how construction or operation of the Proposed Action and No Action Alternative would affect hydrology or water quality of regional and local surface waters and ground water.

### Environmental Consequences

#### Proposed Action

**Construction**

**Water Quality Degradation – General Construction Activity**

Construction work under the Proposed Action which may impact water quality would include removal and replacement of exterior walls and roof material, excavation of trenches for services, soil stockpiling and material and aggregate stockpiling. Improper handling of the exterior façade to be removed could lead to mobilization of residual lead in paint, particularly during strong wind and rain.

Wind and rain again would have the potential to mobilize stockpiled material for the concrete slab or surface coating for exterior cladding and roofing. This material may be a source of chemical contamination from use of alkaline construction materials (e.g., concrete, mortar, hydrated lime) and hazardous or toxic materials, such as paints. The footprint of utility trenches and stockpiled spoil...
following excavation may enter the storm water drain system or Richardson Bay via surface runoff or mobilized by wind. If not properly managed, construction work could increase sediment and hazardous material load in Richardson Bay, thereby adversely affecting water quality and designated beneficial uses of the area. Impact would likely be minor and likely temporary.

Potential adverse effects would be minimized by implementing the requirements for protection of water resources outlined in the VA Specification Section 01 57 19, *Temporary Environmental Controls*. These requirements include such measures as setting work area limits, reducing exposure of unprotected soils, protecting disturbed areas, installing erosion and sediment control devices, and managing spoil areas. As the total area of disturbance would be less than 1.0 acre, the Proposed Action would not qualify for coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009, as amended by Order No. 2010-0014), which requires implementation of a stormwater pollution prevention plan (SWPPP) to minimize the discharge of pollutants during construction. However, adherence to Section 015719, which would include the follow best management practices (BMPs), would address potential construction-period water quality issues.

- Scheduling construction to minimize ground disturbance during the rainy season, and installing erosion and sediment control BMPs prior to the start of any ground-disturbing activities.
- Installing an effective combination of erosion- and sediment-control management measures around the perimeters of the construction zone, staging areas, temporary stockpiles, and spoil areas, as necessary to prevent off-site sedimentation.
- Grading and stabilizing construction site entrances and exits to prevent runoff from the campus and to prevent erosion.
- Storing hazardous materials in an area protected from rainfall and stormwater run-on and preventing the offsite discharge of leaks or spills.
- Removing trash and construction debris from the construction area regularly, and providing an adequate number of waste containers with lids or covers to keep rain out of the containers and to prevent trash and debris from being blown away during high winds.
- Provide proper and adequately-sized containment and management of potentially hazardous chemicals used during construction.
- Inspecting all BMPs on a regular basis to confirm proper installation and function, and inspect daily during storms.
- Re-surfacing temporarily disturbed areas as required after construction activities are completed and phase the removal of temporary BMPs as necessary to ensure stabilization of the site.

Therefore, through compliance with these requirements and regulations, general construction activities associated with the Proposed Action would not result in substantial water quality degradation.

**Operation**

**Alteration of Drainage Patterns**

The area proposed for the modular buildings is currently covered in asphalt. It is proposed that rainfall runoff from the roofing of the modular buildings would be discharged to the asphalt surface, via downspouts and directed in sheet flow across the site. There would not be substantial change to existing drainage patterns and all flows would be managed by the existing drain structures on the north and south
of site. Therefore, implementation the Proposed Action would not substantially alter existing drainage patterns of the site in a manner that would increase the rate, amount, or quality of surface runoff resulting in flooding on- or off-site or degradation of receiving waters.

3.6.3.2 **No Action Alternative**

Under the No Action Alternative, none of the changes to the site under the Proposed Action would occur. Therefore, this alternative would not result in construction or operation-related effects on surface hydrology, groundwater, and water quality.
3.7 Wildlife and Habitat

IMPACTS

| S | M | MI | N 
|---|---|----|---

ATTRIBUTES

- ☑ PRESENCE OF ENDANGERED OR THREATENED WILDLIFE SPECIES
- ☑ TREE REMOVAL/TRIMMING
- ☑ GROUNDCOVER REMOVAL
- ☑ SPECIAL STATUS SPECIES
- ☑ LONG TERM
- ☑ SHORT TERM
- ☑ CUMULATIVE

3.7.1 Affected Environment

3.7.1.1 Federal Endangered Species Act

The Endangered Species Act (ESA) was enacted in 1973 (7 U.S.C. 136, 16 U.S.C. 1531 et seq.), giving the Secretary of the Interior and the Secretary of Commerce the authority to list a species as threatened or endangered (16 U.S.C. 1533[c]). The ESA is administered by both the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). NMFS is accountable for animals that spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish such as Pacific salmon. USFWS is accountable for all other Federally-listed plants and animals.

Pursuant to the requirements of the ESA, a Federal agency authorizing, funding or carrying out an action within its jurisdiction must determine whether any Federally listed threatened or endangered species may be present in the project site and determine whether the agency’s action could affect any Federally-listed species (16 U.S.C. 1536(a)(2), (3)). If the action would likely affect a listed species, the agency must consult with the USFWS or NMFS under Section 7 of the ESA to determine whether the action is likely to jeopardize the continued existence of the species or result in the destruction or adverse modification of designated critical habitat (16 U.S.C. 1536(a)(2)).

3.7.1.2 California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Sections 2050 to 2097) is administered by California Department of Fish and Wildlife (CDFW). CESA prohibits the take of plant and animal species designated by the California Fish and Game Commission as either threatened or endangered in the state of California. “Take” in the context of CESA means to hunt, pursue, kill, or capture a listed species, as well as any other actions that may result in adverse impacts when attempting to take individuals of a listed species.

3.7.1.3 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), as amended, makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued by USFWS. The
MBTA does not provide protection for habitat of migratory birds. Permits are issued to qualified applicants for only the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal.

3.7.1.4 City of Sausalito, Municipal Code Chapter 11.12, Preservation of Trees and Views
The City’s Municipal Code includes regulations addressing tree protection. Under this ordinance, it is unlawful for any person to remove or alter any protected trees, without a permit issued and posted except for the purpose of routine pruning. It should be known that this ordinance applies only to trees on privately- or City-owned properties. The following trees are listed as “undesirable trees” and are not included as “protected trees” in the Municipal Code:
- Blue gum eucalyptus
- Monterey pine
- Monterey cypress
- Coast redwood

3.7.2 Assessment Methods
The impact analysis compares projected future conditions to the affected environment, and identifies potential construction or operational impacts that can reasonably be anticipated to be caused by or result from the Proposed Action and No Action Alternative. The assessment of potential impacts on botanical and wildlife resources, including habitat, was based on the relationship between species and habitat distribution and the locations and activities proposed for construction and operation of the Proposed Action. Sources of information for determining special-status species that could occur in the project area included the California Natural Diversity Database (CNDDB), the California Natural Plant Society (CNPS) Online Inventory, and USFWS endangered and threatened species database. Potential adverse effects on special-status plants and wildlife were based on known occurrences or on the likelihood that suitable habitat for special-status species would be affected. The results of this research are found in Appendix A, Table A-1, Special-Status Species in the Project Vicinity.

3.7.3 Affected Environment

3.7.3.1 Proposed Action

Construction

Federally Listed Plant and Wildlife Species
No Federally listed plants or wildlife species are anticipated to occur at the Proposed Action site due to absence of appropriate habitat, stemming from the historic development on the project site and its surroundings. Therefore, the Proposed Action would not cause disruption to, or removal of, a Federally-listed endangered or threatened species, its habitat, migration corridors, or breeding areas.

Federally Protected Migratory Birds
The Proposed Action would include the removal up to eight eucalyptus and pine trees at the Proposed Action site. If the tree removals were to occur during the avian nesting season (approximately February through August of each year), migratory passerines and raptors covered under the Migratory Bird Treaty Act could potentially be nesting in trees or building canopies at the Proposed Action site and therefore, could be affected by construction activities.
Potential adverse effects would be minimized by implementing the requirements for protection of wildlife outlined in the VA Specification Section 015719, Temporary Environmental Controls. Additionally, implementation of the Proposed Action would be required to comply with Federal and state regulations that protect nesting birds. Minimization measures would include scheduling tree removals outside of nesting seasons (as feasible), and where not feasible, requiring pre-construction nesting surveys. If migratory bird and/or active raptor nests are identified, a qualified biologist would determine whether or not construction activities might impact the active nest or disrupt reproductive behavior, and the VA would consult with the CDFW to determine appropriate measures for avoiding disturbance or destruction of active nest sites until after the breeding season or after the young have fledged, such as protection zones. The extent of such protection zones would depend on the species’ sensitivity to disturbance (which can vary among species); the level of noise or construction disturbance; line of sight between the nest and the disturbance; ambient levels of noise and other disturbances; and consideration of other topographical or artificial barriers.

Therefore, through compliance with these controls and regulations, tree removal associated with the Proposed Action would not result in substantial adverse effects on Federally protected migratory birds, if they were present at the site during construction.

**State Listed Plant and Wildlife Species**

No state listed special-status plant species are anticipated to occur at the Proposed Action site due to absence of appropriate habitat and because of the developed and landscaped environment of the site and its surroundings. Therefore, construction of the Proposed Action would not result in adverse effects on state-listed special-status plants.

**Vegetation and Habitat**

The majority of the Proposed Action site has been developed since the 1940s and includes paved surfaces and buildings that prevent vegetation from emerging. No Federally-designated or proposed critical habitat for any endangered or threatened species is anticipated to be located on the project site. Urban environments, such as those present at the site, are unlikely to provide suitable habitat for rare plants or special-status wildlife species due to disturbed/developed site conditions, the predominance of exotic landscape species that tend to out-compete native vegetation for resources (e.g., space, nutrients and water), and the lack of vegetative cover necessary for food and shelter from predators. Therefore, construction of the Proposed Action would not result in substantial adverse effects.

The Proposed Action would involve the removal of approximately eight trees on private land as part of the construction activities. The trees include Monterey pine and blue gum eucalyptus trees, which are not protected under the City’s Municipal Code. The VA would work with the City to determine how the trees could be replaced to the mutual benefit of both parties. Therefore, the construction would not result in substantial adverse effects on protected trees, or conflict with local policies protecting biological resources.

**Operation**

Due to the developed nature of the project site and its relatively small size, no long-term effects to vegetation or wildlife are anticipated. With implementation of the minimization measures described above, there would be no long-term net loss of trees or permanent effect on biological resources at the site. In addition, implementation of the Proposed Action would not increase the overall developed footprint of the site and, therefore, the condition of surrounding habitat is not anticipated to be adversely affected.
3.7.3.2 No Action Alternative

Under the No Action Alternative, none of the changes under the Proposed Action would occur. Therefore, no activities would occur that could adversely affect nesting birds or other protected species. The No Action Alternative would not result in new construction or operation-related effects on wildlife or habitat.
3.8 Noise

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S & M & MI & N \\
\checkmark & \checkmark & \checkmark & \checkmark \\
\end{array} \]

ATTRIBUTES

- \( \checkmark \) UTILITY SOURCE GENERATION
- \( \checkmark \) TRAFFIC
- \( \checkmark \) CONSTRUCTION
- \( \checkmark \) ADVERSE
- \( \checkmark \) BENEFICIAL
- \( \checkmark \) OPERATIONAL
- \( \checkmark \) VIBRATIONS
- \( \checkmark \) LONG TERM
- \( \checkmark \) SHOR TERM
- \( \checkmark \) CUMULATIVE

3.8.1 Affected Environment

3.8.1.1 Existing Noise Environment and Sensitive Receptors

Roadway traffic on Bridgeway Boulevard, Marinship Way, and Liberty Ship Way all influence the existing noise environment of the project site. In addition, parking lot noise (e.g., car doors slamming, car alarms, engines starting, voices, etc.), building mechanical and ventilation equipment, and loading areas also contribute, to a lesser extent, to the existing noise environment. The nearest sensitive noise receptors include residential areas south and west of Bridgeway Boulevard, as well as boats moored at the Liberty Ship Marina adjacent and to the east of the project site.

3.8.1.2 Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. There are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a 10-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. The most common noise unit used in California is the A-weighted sound level or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive.

3.8.1.3 Construction Noise

Construction noise is generated by the operation of construction equipment and the transport of material and workers to and from a site. Construction noise levels are a function of the type of equipment used and the timing and duration of the noise-generating activities. As shown in Table 3.8-1 (Noise Levels of Typical Construction Equipment), maximum noise levels from construction equipment typically range from about 70 to 90 dBA at 50 feet from the equipment. These noise levels vary for individual pieces of equipment, as equipment may come in different sizes and with different engines. In a typical construction project, the loudest short-term noise generators tend to be earth-moving equipment under full load at approximately 85 to 90 dBA at a distance of 50 feet from the source.
Noise levels from construction activities are typically considered as point sources and attenuate (i.e., decrease) with distance at a rate of 6 dBA per doubling of distance over hard site surfaces, such as streets and parking lots, and a rate of 7.5 dBA per doubling of distance for soft site surfaces, such as grass fields and open terrain with vegetation (Federal Transit Administration [FTA], 2006).

Table 3.8-1 Noise Levels of Typical Construction Equipment

<table>
<thead>
<tr>
<th>Building Category</th>
<th>Typical Noise Level (dBA) at 50 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air compressor</td>
<td>80</td>
</tr>
<tr>
<td>Backhoe</td>
<td>80</td>
</tr>
<tr>
<td>Concrete pump truck</td>
<td>82</td>
</tr>
<tr>
<td>Crane, mobile</td>
<td>85</td>
</tr>
<tr>
<td>Dozer</td>
<td>85</td>
</tr>
<tr>
<td>Drill rig truck</td>
<td>84</td>
</tr>
<tr>
<td>Excavator</td>
<td>85</td>
</tr>
<tr>
<td>Front-end loader</td>
<td>80</td>
</tr>
<tr>
<td>Generator</td>
<td>82</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>85</td>
</tr>
<tr>
<td>Lift</td>
<td>85</td>
</tr>
<tr>
<td>Mounted impact hammer (hoe ram)</td>
<td>90</td>
</tr>
<tr>
<td>Pneumatic tools</td>
<td>85</td>
</tr>
<tr>
<td>Pumps</td>
<td>77</td>
</tr>
<tr>
<td>Roller</td>
<td>85</td>
</tr>
<tr>
<td>Soil mix drill rig</td>
<td>80</td>
</tr>
<tr>
<td>Welder</td>
<td>73</td>
</tr>
<tr>
<td>Trucks</td>
<td>74-81</td>
</tr>
</tbody>
</table>

Source: FHWA 2006

3.8.1.4 Ground-borne Vibration

The effects of ground-borne vibration may include perceivable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Construction activities can cause ground-borne vibration that varies in intensity depending on several factors. Construction of projects under the Proposed Action are not anticipated to require pile driving and therefore standard construction techniques would be used to construct the modular buildings and rehabilitate the exterior of the machine shop. Without pile driving, the construction activities that would produce the greatest amount of ground-borne vibration would be
associated with excavation and grading activities. As shown in Table 3.8-2, these activities would involve
the use of earthmoving and compaction equipment that can produce ground-borne vibration levels at 25
feet with Peak Particle Velocities (PPV) between 0.003 and 0.210 inches per second.

Table 3.8-2 Representative Vibration Source Levels for Construction Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>PPV at 25 feet (in/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibratory Roller</td>
<td>0.210</td>
</tr>
<tr>
<td>Large Bulldozer</td>
<td>0.089</td>
</tr>
<tr>
<td>Hoe Ram</td>
<td>0.089</td>
</tr>
<tr>
<td>Trucks</td>
<td>0.089</td>
</tr>
<tr>
<td>Concrete Breaker</td>
<td>0.059</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>0.035</td>
</tr>
<tr>
<td>Small Bulldozer</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Source: FTA 2006

3.8.1.5 Local Agency Noise Standards

Because the Proposed Action is a Federal action on Federally-owned land, it is not subject to the City of
Sausalito or Marin County noise ordinances; however, these ordinances are discussed here for reference
and context.

The City of Sausalito Municipal Code, Chapter 12.16, Noise Control, defines noise levels for commercial
and industrial property noise limits and construction related noise. The operation of construction,
demolition, excavation, alteration or repair devices and equipment shall only take place weekdays
between 8:00 AM and 6:00 PM, Saturdays between 9:00 AM and 5:00 PM, and Sundays are prohibited.
Holidays officially recognized by the City of Sausalito not including Sundays are between the hours of
9:00 AM and 7:00 PM.

Under the Marin County Code, Chapter 6.70, Loud and Unnecessary Noises, Section 6.70.030(5) a.,
hours for construction activities and other work undertaken in connection with building, plumbing,
electrical, and other permits issued by the community development agency shall be limited to the
following: Monday through Friday: 7:00 AM to 6:00 PM, Saturday: 9:00 AM to 5:00 PM, and prohibited on
Sundays and holidays.

3.8.1.6 VA Noise Standards

The VA’s Temporary Environmental Controls Section 01 57 19 F. (Reduction of Noise) required
construction activities involving repetitive, high-level impact noise to be performed only between 8:00 AM
and 6:00 PM unless otherwise permitted by local ordinance or the Resident Engineer. Repetitive impact
noise on the property shall not exceed the following dB limitations:

<table>
<thead>
<tr>
<th>Time Duration of Impact Noise</th>
<th>Sound Level in dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 12 minutes in any hour</td>
<td>70</td>
</tr>
<tr>
<td>Less than 30 seconds of any hour</td>
<td>85</td>
</tr>
<tr>
<td>Less than three minutes of any hour</td>
<td>80</td>
</tr>
<tr>
<td>Less than 12 minutes of any hour</td>
<td>75</td>
</tr>
</tbody>
</table>
3.8.2 Assessment Methods

The noise and vibration assessment evaluates both short-term and long-term impacts associated with construction and operation of projects under the Proposed Action. For construction noise, several factors were considered, including the proximity of construction-related noise sources to noise-sensitive land uses (i.e., sensitive receptors), and typical noise levels associated with construction equipment. The assessment of vibration impacts was conducted using information on anticipated vibration during construction. For operational noise, the noise generation potential of proposed facilities, and the proximity of sensitive receptors, was evaluated.

3.8.3 Environmental Consequences

3.8.3.1 Proposed Action

Construction

Construction Noise

Short-term increases in noise levels would be generated by construction equipment and vehicles during construction. Typical construction equipment would include backhoes, cranes, excavators, front end loaders, pavers, vibratory rollers and pickup trucks. As shown in Table 3.8-1 above, operation of this construction equipment would generate noise levels ranging from about 74 dBA to 85 dBA at 50 feet from the equipment.

Construction noise would be temporary in nature and limited to daytime hours – 8:00 AM to 5:00 PM. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive areas. Noise generated by construction activities would be the greatest during tree removal and trimming, site grading, and excavation for underground utilities.

The noise levels from each of these construction activities would be typical of construction projects and would be minimized by implementing the requirements for noise control outlined in the VA Specification Section 01 57 19, Temporary Environmental Controls. These controls include such requirements as providing sound-deadening devices on equipment, using shields or other physical barriers to restrict noise transmission, providing soundproof housings or enclosures for noise-producing machinery, and monitoring construction noise levels once a week when work is being performed that exceeds 55 dBA.

In addition, VA Specification Section 01 57 19 requires all equipment to be properly maintained and muffled such that noise levels of specific equipment would not exceed the levels shown below in Table 3.8-3.
Table 3.8-3 Maximum Permissible Construction Equipment Noise Levels

<table>
<thead>
<tr>
<th>Earthmoving</th>
<th>Maximum Permissible Noise Level ($L_{\text{max}}$ at 50 feet)</th>
<th>Materials Handling</th>
<th>Maximum Permissible Noise Level ($L_{\text{max}}$ at 50 feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Loaders</td>
<td>75</td>
<td>Concrete Mixers</td>
<td>75</td>
</tr>
<tr>
<td>Backhoes</td>
<td>75</td>
<td>Concrete Pumps</td>
<td>75</td>
</tr>
<tr>
<td>Dozers</td>
<td>75</td>
<td>Cranes</td>
<td>75</td>
</tr>
<tr>
<td>Tractors</td>
<td>75</td>
<td>Derrick's Impact</td>
<td>75</td>
</tr>
<tr>
<td>Scrapers</td>
<td>80</td>
<td>Pile Drivers</td>
<td>95</td>
</tr>
<tr>
<td>Graders</td>
<td>75</td>
<td>Jack Hammers</td>
<td>75</td>
</tr>
<tr>
<td>Trucks</td>
<td>75</td>
<td>Rock Drills</td>
<td>80</td>
</tr>
<tr>
<td>Pavers</td>
<td>80</td>
<td>Pneumatic Tools</td>
<td>80</td>
</tr>
<tr>
<td>Pumps</td>
<td>75</td>
<td>Blasting</td>
<td>---</td>
</tr>
<tr>
<td>Generators</td>
<td>75</td>
<td>Saws</td>
<td>75</td>
</tr>
<tr>
<td>Compressors</td>
<td>75</td>
<td>Vibrators</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: VA Specification Section 01 57 19, Temporary Environmental Controls

To further minimize temporary construction related noise during construction activities under the Proposed Action, the VA will designate a noise disturbance coordinator to be responsible for responding to any complaints received about noise from construction activities. Prior to and during construction, the noise disturbance coordinator will evaluate sources of construction noise, and require implementation of measures to minimize disturbance, such as:

- Requiring construction contractors to utilize “quiet” models of air compressors and other stationary noise sources where technology exists.
- Prohibiting unnecessary idling of internal combustion engines.
- Locating stationary construction-related noise-generating equipment as far as practicable from sensitive receptors, and placing the equipment so that the emitted noise is directed away from receptors.
- Locating construction staging areas to create the greatest distance between the construction-related noise sources and noise-sensitive receptors.
- Requiring the highest noise-producing work to be performed in less sensitive hours of the day.

The implementation of these minimization measures would be expected to provide up to 5 to 10 dBA of additional noise reduction at the nearest sensitive receptors during construction. Noise levels would not exceed the VA’s maximum permissible noise levels summarized in Table 3.8-3, and the maximum anticipated noise exposure during construction to off-site sensitive receptors would be less than local standards. Therefore, construction activities under the Proposed Action would not result in a substantial temporary increase in ambient noise levels during construction.
Ground-borne Vibration

The Federal Transit Authority (FTA) has developed standards to address the potential for construction-caused vibration annoyance or interference and are used here for impact assessment purposes. The primary concern related to construction vibration is the potential to cause structural damage to buildings by the operation of heavy-duty construction equipment. Table 3.8-4 shows the allowable project contribution vibration level thresholds determined to be acceptable for different building types.

Table 3.8-4 Summary of FTA-Recommended Vibration Damage Criteria

<table>
<thead>
<tr>
<th>Building Category</th>
<th>PPV (in/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforced concrete, steel, or timber (no plaster)</td>
<td>0.5</td>
</tr>
<tr>
<td>Engineered concrete and masonry (no plaster)</td>
<td>0.3</td>
</tr>
<tr>
<td>Non-engineered timber and masonry buildings</td>
<td>0.2</td>
</tr>
<tr>
<td>Buildings extremely susceptible to vibration damage</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Source: FTA 2006

Construction activities under the Proposed Action are not anticipated to require pile driving and, therefore, standard construction techniques would be used to construct the modular buildings and rehabilitate the exterior of the machine shop. Without pile driving, the construction activities that would produce the greatest amount of ground-borne vibration would be associated with excavation and grading activities. As shown in Table 3.8-2 above, these activities would involve the use of earthmoving and compaction equipment that can produce ground-borne vibration levels between 0.003 and 0.210 inches per second PPV at 25 feet. Therefore, based on the vibration source levels for construction-related equipment, vibration levels would be expected to attenuate over distance to less than 0.2 in/sec PPV at locations more than 25 feet from construction sources. Therefore, construction activities under the Proposed Action would not generate ground-borne vibration levels that would be detrimental to the stability of adjacent buildings.

Operation

Noise from the proposed new modular buildings under the Proposed Action would primarily be contained within those structures and would be similar to the sources already present in the vicinity (i.e. parking areas, vehicular traffic). The new modular buildings would not contribute substantially to the ambient noise environment and their use is not expected to generate increased noise levels substantially above those currently generated by the existing uses.

The new modular buildings would provide office space for approximately 75 occupants, which could equate to up to 67 additional vehicles on adjacent roadways during work hours (see Section 3.13, Transportation and Parking). These potential operation-related vehicle trips generated at the project site would not substantially increase traffic noise in the project vicinity above existing thresholds. Therefore, operation of the Proposed Action would not result in substantial increase in ambient noise levels.

3.8.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the project site under the Proposed Action would occur. Therefore, no additional short-term effects on noise on- and off-site typical of construction activities
would occur; nor would there be noise generated from operations at the site. The No Action Alternative would not result in new construction or operation-related effects on noise.
3.9  Floodplains, Wetlands, and Coastal Zone Management

IMPACTS

S  M  MI  N
☐  ☐  ☒  ☐

ATTRIBUTES

☐  100-YEAR FLOODPLAIN  ☒  COASTAL ZONE MANAGEMENT AREA
☐  500-YEAR FLOODPLAIN  ☐  WETLANDS
☐  CRITICAL ACTION (E.O. 11988)  ☐  LONG-TERM
☐  ADVERSE  ☐  SHORT TERM
☐  BENEFICIAL  ☐  CUMULATIVE

3.9.1  Affected Environment

3.9.1.1  Floodplains

The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards as part of the National Flood Insurance Program. The most recent Flood Insurance Study for Marin County became effective on May 4, 2009, though the study is currently under revision. Flood hazard zones near the project site are shown on FEMA panel number 06041C0526D (FEMA 2009). According to this panel, the coastal edge of the site – covering approximately half of the storage shed – is in the VE Zone, which is the Coastal Flood Zone and subject to velocity (wave action) hazard. The remainder of the site is zoned as being outside the 0.2 percent annual chance floodplain.

3.9.1.2  Wetlands

Given the developed nature of the entire project site, there are no wetlands on the subject site. Richardson Bay, immediately to the east of the site, would be considered as "open waters" under Corps guidance.

3.9.1.3  Coastal Zones

California’s Coastal Management Program, Federally approved in 1977, designates two coastal zone management agencies to implement the Federal consistency provisions set forth in the Coastal Zone Management Act (CZMA): (1) the California Coastal Commission for all coastal areas outside San Francisco Bay; and, (2) the San Francisco Bay Conservation and Development Commission (BCDC) for the coastal areas along San Francisco Bay. The site’s location in the coastal zone along Richardson’s Bay, a part of San Francisco Bay, puts it in the jurisdiction of BCDC. BCDC generally has jurisdiction over the open water, marshes, and mudflats of the San Francisco Bay, the first 100 feet inland from the shoreline around Bay, as well as up the mainstem of numerous tributary streams. Part of the subject property is located within the BCDC’s 100-foot jurisdiction; specifically the storage shed and waterward on the site.

Part of the northeast of the site has been identified as being in the tsunami evacuation zone in the Association of Bay Area Governments (ABAG) Resilience Program.
3.9.2 Assessment Methods

Regional documents and FEMA maps were reviewed to identify floodplain, wetland, and coastal zone management resources that could be directly or indirectly affected by construction or operation of the Proposed Action. As noted above, no wetlands, streams, or other water features are within the Project site.

3.9.3 Environmental Consequences

3.9.3.1 Proposed Action

Construction

As identified in Section 3.9.1, the project work area is not situated within a FEMA-designated floodplain. Additionally there are no wetlands or open waters regulated under Federal or state law that occur on the project site. Therefore, implementation of the Proposed Action would not be subject to known flooding impacts or result in adverse effects on wetland or coastal resources, outside that covered in Section 3.6 (Hydrology and Water Quality).

Operation

The new modular buildings and parking areas would not be within a FEMA-designated floodplain. The eastern portion of the site is in a tsunami evacuation area (ABAG Resilience Program 2014). Operation of the Proposed Action would not be subject to known flooding impacts, but contingency should be made for tsunami evacuation in the site Emergency Response Plan.

The subject property is situated within a BCDC designated coastal zone area, although the portions that comprise this Proposed Action are not. While based on the analyses herein, it is likely that implementation of the Proposed Action would not result in adverse effects within the coastal zone, the VA must conduct a “federal consistency” determination with BCDC, pursuant to Section 307 of the CZMA. As part of the project planning process, the VA is required to consult with BCDC to determine whether the Proposed Action would be consistent with BCDC development regulation or exempt from review pursuant to Section 304 of the CZMA. This consistency determination is being conducted concurrent with this environmental review.

3.9.3.2 No Action Alternative

Under the No Action Alternative, none of the site development proposed under the Proposed Action would occur. Therefore, this alternative would not result in new construction or operation-related effects on floodplains, wetlands, and coastal zone resources. The site would remain unoccupied; the tsunami evacuation zone would not be occupied.
3.10 Socioeconomics and Environmental Justice

IMPACTS

S | M | MI | N
☐ | ☐ | ☐ | ☑

ATTRIBUTES

☒ REDUCTION IN WAGES TO AREA
☒ ADDITIONAL WAGES TO AREA
☐ DISPROPORTIONATELY HIGH AND ADVERSE HUMAN HEALTH OR ENVIRONMENTAL EFFECTS ON MINORITY AND LOW-INCOME POPULATIONS
☒ LONG-TERM
☒ SHORT-TERM
☐ CUMULATIVE

☐ INCREASE OR DECREASE IN WORK FORCE

3.10.1 Affected Environment

3.10.1.1 Local Population and Jobs

Table 3.10-1, Local Population and Jobs, summarizes past, present and future projections for Sausalito and Marin County related to population and employment. The total number of jobs in Sausalito and Marin County decreased between 2000 and 2010, whereas an increase in total jobs is expected in Sausalito and Marin County between 2010 and 2020.

Table 3.10-1 Local Population and Jobs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sausalito</td>
<td>7,330</td>
<td>7,061</td>
<td>7,600</td>
<td>7,700</td>
<td>-269</td>
<td>+639</td>
</tr>
<tr>
<td>Marin County</td>
<td>247,289</td>
<td>252,409</td>
<td>260,300</td>
<td>264,000</td>
<td>+5,120</td>
<td>+11,591</td>
</tr>
<tr>
<td>Total Jobs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sausalito</td>
<td>6,870</td>
<td>6,220</td>
<td>7,400</td>
<td>7,590</td>
<td>-650</td>
<td>+1,370</td>
</tr>
<tr>
<td>Marin County</td>
<td>134,180</td>
<td>110,730</td>
<td>139,110</td>
<td>143,780</td>
<td>-23,450</td>
<td>+33,050</td>
</tr>
</tbody>
</table>

Sources: California Department of Finance 2014, ABAG 2009, U.S. Census Bureau 2010

3.10.1.2 Income and Unemployment

The U.S. Census Bureau determines poverty status by comparing annual income to a set of dollar values called poverty thresholds that vary by family size, number of children and age of householder. If a family's before tax income is less than the dollar value of the Bureau's threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is...
determined by comparing the individual's income to his or her poverty threshold. The poverty thresholds are updated annually to allow for changes in the cost of living.

According to the U.S. Census Bureau, the most recent poverty status information for the 5-year estimate (2009-2013) for Sausalito indicates that 5.9 percent of the population is below the poverty level, and the percentage of people below the poverty level in Marin County is 7.7 percent (U.S. Census Bureau 2013a, 2013b).

3.10.1.3 Environmental Justice

Environmental justice impacts refer to disproportionately high and adverse human health or environmental effects of a Proposed Action on low-income populations, minority populations, or Native American tribes. Consistent with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Federal agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of its actions on minority or low-income populations.

The CEQ has issued guidance to Federal agencies on the terms used in Executive Order 12898, as follows (CEQ 1997):

- **Low-income Population.** Low-income populations in an affected area should be identified using the annual statistical poverty thresholds from the U.S. Bureau of Census’s Current Population Reports, Series P-60, on Income and Poverty.

- **Minority.** Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not Hispanic origin; or Hispanic.

- **Minority Population.** Minority populations should be identified where: (a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

- **Disproportionately High and Adverse Human Health Effects.** When determining whether human health effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable:
  1. Whether the health effects, which may be measured in risks and rates, are significant (as defined by NEPA), or above generally accepted norms;
  2. Whether the risk or rate of hazard exposure to a minority population, low income population, or Native American tribe to an environmental hazard is significant (as defined by NEPA) and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group; and
  3. Whether health effects occur in a minority population, low-income population, or Native American tribe affected by cumulative or multiple adverse exposure to environmental hazards.

- **Disproportionately High and Adverse Environmental Effects.** When determining whether environmental effects are disproportionately high and adverse, agencies are to consider the following three factors to the extent practicable:
1. Whether there is or will be an impact on the natural or physical environment that significantly (as defined by NEPA) and adversely affects a minority population, low-income population, or Native American tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on natural or physical environment;

2. Whether environmental effects are significant (as defined by NEPA) and are or may be having an adverse impact on minority populations, low income populations, or Native American tribes that appreciably exceed or are likely to appreciably exceed those on the general population or other appropriate comparison group; and

3. Whether the environmental effects occur or would occur in a minority population, low-income population, or Native American tribe affected by cumulative or multiple adverse exposures from environmental hazards.

In order to identify if any potential disproportionate adverse environmental justice effects would be associated with the implementation of the Proposed Action, existing environmental justice characteristics (i.e., minority and low-income population) in the community were identified. Table 3.10-2 presents statistics on low-income and minority population characteristics for the study area.

**Table 3.10-2 Environmental Justice Population Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Total Population Estimate</th>
<th>Percent Minority</th>
<th>Percent Below Poverty Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census Tract 1302.02</td>
<td>4,071</td>
<td>10.9</td>
<td>7.9</td>
</tr>
<tr>
<td>City of Sausalito</td>
<td>7,029</td>
<td>10.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Marin County</td>
<td>254,643</td>
<td>24.5</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau 2013a, 2013b, 2013c, 2013d, 2013e, 2013f

**3.10.2 Assessment Methods**

The CEQ's national guidance suggests that Federal agencies consider opportunities to reduce socioeconomic impacts caused by proposed Federal actions and address these issues in their agency NEPA procedures. According to CEQ's draft national guidance, there are two main considerations when addressing socioeconomics in environmental documentation: (1) the impacts of a proposed action or alternatives on local or regional socioeconomic conditions, and (2) the environmental justice impacts of a proposed action or alternatives.

Socioeconomic impacts refer to the basic attributes and resources associated with the human environment, with particular emphasis on population and employment. Potential impacts can be related to the displacement of populations, residences, and/or businesses; impacts on the availability of housing or accommodation; and the inducement of unplanned growth. Socioeconomic impacts can also stem from the nature and duration of construction and operational activities that, in turn, may lead to displacement or modification of existing activities, and any diversion or temporary suspension of access associated with a Proposed Action.
Environmental justice impacts refer to disproportionately high and adverse human health or environmental effects of a Proposed Action on low-income populations, minority populations, or Indian tribes. In order to identify if any potential disproportionate adverse environmental justice effects would be associated with the implementation of the Proposed Action, existing environmental justice characteristics in the community directly affected were identified and evaluated.

3.10.3 Environmental Consequences

3.10.3.1 Proposed Action

Construction and Operation

Population

As stated in Section 2.2 (Proposed Action), 8,000 square feet of new modular space would be constructed at the site to be used by the VA for administrative and office functions. However, this is not anticipated to induce growth in the area as the space would not be used for housing purposes. Also, the approximately 75 occupants of the modular buildings would be transferred from the SFVAMC campus in San Francisco – 8 miles to the south. It is not anticipated that new hires would be needed or that existing staff would move to Sausalito. Likewise, during construction, employees are anticipated to reside within the San Francisco Bay Area and would not require relocation or new housing. Thus, no adverse effect related to induced population or housing growth would occur under the Proposed Action.

Employment and Income

As shown in Table 3.10-1, the City of Sausalito and Marin County experienced a notable reduction in employment availability (which includes construction jobs) between 2000 and 2010. The potential addition of construction jobs as a result of the Proposed Action would, therefore, likely be supported by the existing skill sets available in the Bay Area’s labor pool. Construction of the Proposed Action would likely have a slight contribution on the local economy from the use of local construction labor and through the possible purchase of construction materials and supplies from local businesses.

Construction and operation of the Proposed Action is not expected to impede residential or business activity within the community. The Proposed Action would not increase the overall footprint of the existing site and would represent a continuation of existing land uses already in place. In fact, the Proposed Action would add approximately 75 employees to the local community, thereby potentially bringing slightly greater economic activity. Therefore, operation of the Proposed Action would not result in an economic loss for the community.

Environmental Justice

As identified in Section 3.10.1, the community surrounding the Proposed Action site does not have a disproportionally high minority or low-income population. In addition, there are no specific impacts on general health or quality of life that would adversely or disproportionately impact the surrounding population. Adverse effects would be minimized and would not be borne by a minority or low-income population and would not be appreciably more severe in magnitude on a minority or low-income population than on a non-minority or non-low-income population. Therefore, no disproportionate adverse environmental justice effects would be associated with the implementation of the Proposed Action.
3.10.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the site under the Proposed Action would occur. No additional short-term effects typical of construction activities would occur. In addition, the No Action Alternative would not result in new operation-related effects on socioeconomics or environmental justice in the local community. Under this alternative, there would be no new construction and, therefore, no contribution to the local economy from the use of local construction labor and possible purchase of construction materials and supplies from local businesses. The Proposed Action would not have an adverse effect to socioeconomics and environmental justice.
3.11 Community Services

IMPACTS

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>MI</th>
<th>N</th>
</tr>
</thead>
</table>

ATTRIBUTES

- ALTERATION OF PUBLIC FACILITIES
- ALTERATION OF PUBLIC SERVICES
- ALTERATION OF PUBLIC UTILITIES

3.11.1 Affected Environment

Community services addressed in this section include fire protection services, emergency [medical] services, law enforcement services, schools, and park facilities. Solid waste disposal is discussed in Section 3.12 (Solid and Hazardous Materials). Other community services, including water, sewage, electricity, and stormwater drainage are discussed in Section 3.14 (Utilities).

3.11.1.1 Fire and Emergency Services

The project site is served by the Southern Marin Fire Protection District, an independent fire district as defined in the California Administrative Code. The Sausalito station houses an engine, a paramedic ambulance, and the Marin County Hazardous Materials Team response unit (Southern Marin Fire Protection District, n.d.). The City of Sausalito’s disaster preparedness and emergency operations program is enforced in coordination with Federal agencies.

3.11.1.2 Law Enforcement Services

Security at the project site is provided by private security services contracted by the Corps for the adjacent Bay Model. Although the project site is considered Federal property outside the jurisdiction of the Sausalito Police Department, the department may provide backup support in the event of emergencies at the project site. The police department has a total of 37 employees and 22 volunteers in public safety (City of Sausalito, 2013a).

3.11.1.3 Schools

The project site is located within the Sausalito Marin City School District. Schools within this district include Bayside Martin Luther King Jr. Academy, which supports grades K-8 (Bayside Academy, 2014). Willow Creek Academy is a K-8 public charter school that is located approximately 0.5 mile northwest of the project site.

3.11.1.4 Parks

Three public city parks are located within 0.5 mile of the project site: Marinship Park is situated to the northeast and provides three lighted tennis courts, a parking lot, and lawn area. Dunphy Park is situated to the southwest and provides a large green area, a sand volleyball area, a bocce court, and a gazebo. Schoonmaker Park is located to the northeast and contains shoreline public access and parking (City of...
Sausalito 2013b). Shoreline Park borders the northern tip of Marinship Park, just north of the Bay Model on the waterfront, and is maintained by local landowners. It provides a green area and walking path.

3.11.2 Assessment Methods

The impact analysis compares projected future conditions to the affected environment and identifies potential construction or operational impacts that can reasonably be anticipated to be caused by or result from the Proposed Action and No Action Alternative. The analysis includes evaluation of the degree to which construction or operations of the Proposed Action or No Action Alternative could affect service related to fire, police, school, and parks.

3.11.3 Environmental Consequences

3.11.3.1 Proposed Action

Construction

Construction activities are not anticipated to adversely affect established service ratios for fire protection, emergency services, law enforcement or schools. Potential incidents requiring fire protection or emergency services could occur during construction. However, the potential temporary increase in incidents would not exceed the capacity of services provided compared to the existing overall population and service area. Any increase in incidents as a result of construction activities at the project site is anticipated to be negligible and could be accommodated by existing service providers.

Security of the site is currently provided by private security services contracted by the Corps for the adjacent Bay Model. Although construction sites can be sources of attractive nuisances (e.g., providing hazards, potential for theft, or vandalism), no substantial increase in security or law enforcement demand would be anticipated given that the project site would secured (e.g., gated, fenced) and not generally accessible to the public. The Proposed Action would not have an effect on school enrollment or use of parks as construction activities would be temporary, lasting only 6 months, and served by 6 to 10 workers from the local labor pool. Therefore, construction of the projects under the Proposed Action would not result in significant construction-related effects on community services.

Operation

The Proposed Action would add 8,000 square feet of modular office space within the Southern Marin Fire Protection District. The buildings would be equipped with a fire alarm system that would be designed to meet Federal, state and local building and fire safety codes. The net increase in occupied building space could increase slightly the demand for fire and emergency response service. However, the potential increase in incidents would not exceed the capacity of services provided compared to the existing overall population and service area. The proposed stabilization and rehabilitation of the historic Machine Shop could slightly decrease the potential for the need for fire and emergency response service by the use of upgraded building materials on the building’s exterior, including new roofing and siding, and removing hazardous materials from the site, including building materials containing asbestos and lead based paints.

Law enforcement services for the site would be provided by the VA with backup provide by the Sausalito Police Department. Although the Proposed Action would install new modular buildings containing office equipment, with the proposed installation of new locked access gates, fencing, and security lighting at the site, the need for law enforcement services is not expected to substantially increase.

December 2015
Approximately 75 VA office and administrative personnel would be relocated from the SFVAMC facility in San Francisco, which is located approximately 8 miles from the project site across the Golden Gate Bridge. It is not anticipated that new hires would be needed or that existing staff would move to Sausalito. Therefore, the Proposed Action would not increase the demand for schools. Site occupants could make occasional use of the two public City parks that are located less than 0.5 mile from the project site. Such use would be random and not impose a substantial demand on these facilities.

Therefore, implementation of the Proposed Action would not impose substantial additional demands or other adverse effects on fire, police, school, or park facilities, and minor operation-related effects on community services would occur.

3.11.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the project site proposed under the Proposed Action would occur. Therefore, this alternative would not result in new, expanded construction or operation-related effects on community services.
3.12 Solid and Hazardous Materials

IMPACTS

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>MI</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

ATTRIBUTES

- STEEL REMOVAL/DEMOLITION
- BULK OPERATIONAL WASTE
- EARTH AND/or ROCK DEBRIS
- POTENTIAL EFFECT ON PUBLIC SAFETY

- LONG TERM
- SHORT TERM
- CUMULATIVE
- CONSTRUCTION SITE STOCKPILING
- HAZARDOUS WASTE
- ADVERSE
- BENEFICIAL

3.12.1 Affected Environment

3.12.1.1 Solid Waste

The VA’s Strategic Sustainability Performance Plan (VA SSPP) was prepared in response to Section 8 of Executive Order 13514, “Federal Leadership in Environmental, Energy, and Economic Performance.” The VA SSPP provides approaches to addressing sustainability goals for a variety of resource areas, including the management and reduction of solid and hazardous wastes for VA facilities. The VA SSPP identifies a diversion target of 50 percent for non-hazardous solid waste, construction and demolition material and debris by 2015.

Solid waste collected in Sausalito by Bay Cities Refuse Service. The solid waste is carted to the Golden Bear Transfer Station, operated by Republic Services. From there, solid waste is generally disposed of at the Keller Canyon Landfill in Bay Point, Contra Costa County. This landfill has a permitted capacity of 75,018,280 cubic yards and a maximum disposal capacity of 3,500 tons per day. The remaining capacity is approximately 63,408,410 cubic yards, with approximately 15 years of site life remaining (CalRecycle 2015). The landfill accepts a variety of materials including construction and demolition materials.

3.12.1.2 Hazardous Materials

The term “hazardous materials” refers to both hazardous substances and hazardous wastes. Under Federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). The term “hazardous material” is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

In some cases, past industrial or commercial activities on a site could have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. Hazardous materials may also be present in building materials and released during building demolition activities.
Hazardous materials may also be required as part of the operation of a project, or may be naturally present in soils such as naturally occurring asbestos found in serpentine minerals.

Hazardous materials and hazardous wastes are subject to numerous Federal, state, and local laws and regulations intended to protect public health and safety and the environment. The U.S. Environmental Protection Agency (U.S. EPA), California Environmental Protection Agency (Cal/EPA), California Department of Toxic Substances Control (DTSC), Regional Water Quality Control Boards, and Bay Area Air Quality Management District (BAAQMD) are the primary agencies that enforce these regulations. In addition, the main focus of the Federal Occupational Safety and Health Administration (Fed/OSHA) and California Occupational Safety and Health Administration (Cal/OSHA) is to prevent work-related injuries and illnesses, including those from exposures to hazardous materials.

In accordance with Chapter 6.11 of the California Health and Safety Code (CHSC, Section 25404, et seq.), local regulatory agencies enforce many Federal and state regulatory programs through the Certified Unified Program Agency (CUPA) program, including:

- Hazardous Materials Business Plans (HMBPs) (Chapter 6.95 of the Health and Safety Code, Sections 25501 et seq.).
- Underground storage tanks (Chapter 6.7 of the Health and Safety Code, Sections 25280 et seq.).
- Aboveground storage tanks (Health and Safety Code Section 25270.5[c]).
- Hazardous waste generator requirements (Chapter 6.5 of the Health and Safety Code, Sections 25100 et seq.).

In Marin County, the Marin County Public Works Department is the CUPA agency responsible for oversight of hazardous materials storage and cleanup of underground fuel leaks. Any entity proposing to remove an underground storage tank (UST) must submit a closure plan to the County prior to tank removal. Upon approval of the UST closure plan, the County would issue a permit, oversee removal of the UST, require additional subsurface sampling if necessary, and issue a site closure letter when the appropriate removal and/or remediation has been completed.

Asbestos abatement is subject to the U.S. EPA's National Emission Standard for Asbestos (40 CFR Part 61 - Subpart M). The U.S. EPA requires that all regulated asbestos-containing materials (RACM) be removed from a facility undergoing renovation/demolition and considers friable asbestos and Category I and Category II non-friable asbestos material that is or will become friable to be RACM. Inspections are required to locate, classify, and document the status of each asbestos-containing material, and any material that is considered RACM must be removed prior to demolition.

State regulatory requirements for asbestos abatement are also set forth in California Health and Safety Code Section 19827.5, as well as Title 8 of the California Code of Regulations, Sections 341.6 through 341.14 and 1529. Safety Code Section 19827.5 requires prohibits local agencies from issuing demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable Federal regulations regarding hazardous air pollutants in the Bay Area. The BAAQMD also provides requirements for abatement of asbestos-containing materials and is vested by the California legislature with authority to regulate airborne pollutants, including asbestos. The BAAQMD regulations pertaining to abatement of asbestos-containing materials are specified in Regulation 11, Hazardous Pollutants, Rule 2, Asbestos Demolition, Renovation and Manufacture.
3.12.2 Assessment Methods

A purpose of the Proposed Action is to remediate suspected or known asbestos and lead-contaminated materials on the exterior of the Machine Shop. To that end, the VA commissioned a Limited Hazardous Materials Sampling Survey focusing on asbestos and lead (U.S. Department of Veterans Affairs, 2014). The findings of this survey are included in this analysis. In addition, regional and local maps and reports were reviewed to identify permitted landfills and potentially hazardous soils or sites in vicinity of the project site that could directly or indirectly affect the Proposed Action or No Action Alternative. The impact assessment addresses the potential for construction to encounter hazardous materials or waste during building stabilization activities and grading activities, as well as the potential to discharge hazardous materials during operations. The evaluation was performed in light of current conditions at the project site, information in environmental databases, applicable regulations and guidelines, and proposed construction activities and operations.

3.12.3 Environmental Consequences

3.12.3.1 Proposed Action

Construction

Solid Waste Disposal

Removal of exterior siding and paint from the Machine Shop and installation of the modular buildings on the project site would result in a temporary increase in solid waste generation. As noted above, the siding and other exterior materials on the Machine Shop is suspected to contain asbestos. In addition, exterior paint is suspected to contain lead. Survey, remediation, and disposal of these materials are discussed below. Installation of the modular buildings and limited underground utility connections could require removal of existing pavement on the site’s parking area.

As summarized in Section 3.12.1, construction activities would be subject to the VA SSPP, which includes a diversion target of 50 percent for non-hazardous solid waste and construction and demolition material and debris by 2015. In addition, management of non-hazardous building construction and demolition waste would be performed in accordance with VA Standard Specification Section 01 74 19, *Construction Waste Management*, which also includes procedures to recycle construction and demolition waste to a minimum of 50 percent.

Several active landfills in the Bay Area with adequate capacity could be used for disposal of construction and demolition material that have no practical reuse or that cannot be salvaged or recycled. This includes the Keller Canyon Landfill which has a remaining capacity of approximately 63,408,410 cubic yards and approximately 15 years of site life remaining (CalRecycle 2015). Therefore, the short-term solid waste disposal needs of construction projects under the Proposed Action would not result in substantial impacts to local landfills.

Transportation, Use, or Disposal of Hazardous Materials

Use of Common Construction Materials

Machine Shop habilitation and modular building installation activities would include the use of common hazardous materials such as fuels, lubricants, degreasers, paints, and solvents. These materials are commonly used during construction projects, are not acutely hazardous, and would be used in relatively small quantities. Numerous laws and regulations ensure the safe transportation, use, storage and disposal of such materials. In addition, Caltrans and the California Highway Patrol strictly regulate the
transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Considering the level of protection afforded by the various requirements, restrictions, and policies enforced by agencies with jurisdiction over the use, storage, or disposal of hazardous materials, the release of any such substances is unlikely.

Disposal of Hazardous Building Materials

Stabilization and renovation of the exterior of the Machine Shop would involve removal of hazardous building materials could present a public health risk if such materials were released during construction. Hazardous building materials include asbestos-containing materials (ACMs) in roofing, siding, walls, ceilings, floors, pipes, and pipe fittings; certain electrical equipment, such as transformers and fluorescent light ballasts that contain polychlorinated biphenyls (PCBs) or di(2-ethylhexyl) phthalate (DEHP); fluorescent lights containing mercury vapors; and lead-based paints (LBP).

As noted above, a Limited Hazardous Material Sampling Survey was conducted for suspected asbestos and lead containing materials. This survey confirmed the presence of both materials on the exterior of the Machine Shop in exceedance of regulatory standards. The asbestos was detected primarily in cementitous shingle and pipe, as well as in roofing mastic. It was found to be U.S. EPA Material Category I and II nonfriable ACM and Cal/OSHA Work Class II. This survey referenced a prior sampling survey effort in 2004 which found that surface coatings (i.e., paint) was found to contain lead in excess of 5,000 parts per million (ppm). This meets the regulatory definition of LBP, as defined by U.S. EPA and the California Department of Public Health (CDPH). Based on this and the Machine Shop’s construction date prior to 1978, this survey assumed that LBP is present on the building’s exterior.

As summarized above, hazardous building materials are subject to numerous Federal, state, and local laws and regulations intended to protect public health and safety and the environment. In addition, the VA also has its own specifications to address this issue. Given the known presence of hazardous materials on the exterior of the Machine Shop, the following mitigative action incorporates the regulatory requirements pertinent to the Proposed Action.

Mitigative Actions – Implementation and Adherence to Regulation

To minimize potential hazards from hazardous building materials, the VA shall require its contractor to implement abatement practices in accordance with applicable regulations. During exterior renovation, the VA shall implement the requirements for preventing uncontrolled release of ACMs and lead and for worker and environmental protection outlined in VA Specification Sections 028213.41, Asbestos Abatement for Total Demolition Projects and Section 028333.13, Lead-Based Paint Removal and Disposal.

The demolition and removal of ACMs shall be subject to applicable Cal/OSHA and BAAQMD regulations (Regulation 11, Rule 2, Asbestos Demolition, Renovation and Manufacturing). In accordance with this regulation, BAAQMD must be notified 10 days in advance of any proposed demolition or abatement work, even if no ACMs are present. This notification must include:

- the names and addresses of operations and persons responsible;
- description and location of the structure to be demolished/altered, including size, age, and prior use;
- approximate amount of friable asbestos;
• scheduled starting and completion dates of demolition or abatement;
• nature of planned work and methods to be employed;
• procedures to be employed to meet BAAQMD requirements; and
• the name and location of the waste disposal site to be used.

ACMs shall be removed and the work site shall be cleaned of asbestos materials. Containment shall be provided during work and there must be no visible emissions to the outside air from demolition operations that involve asbestos-containing materials. The contractor shall use methods specified in the regulations for control of emissions, such as wetting of exposed asbestos-containing materials; use of a high-efficiency particulate air (HEPA) filter within an exhaust, ventilation, and control system; or removal in an entirely contained chute.

Abatement of lead-containing paint shall be performed in accordance with the VA Standard Specification 028333.13, as well as state and local standards for construction worker health and safety during renovation, including Title 17 of the CCR, Sections 35001 through 3600. A lead-containing paint removal plan shall be developed in accordance with the VA Standard Specification 028333.13. As required by Cal/OSHA’s Lead in Construction Standard (8 CCR 1532.1), the plan shall describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. As required, Cal/OSHA shall receive 24-hour notification if more than 100 square feet of lead-based paint shall be disturbed.

Lead-containing paint shall be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations, including BAAQMD Regulation 11, Rule 1, Lead, and shall be performed in a manner to minimize contamination of work areas with lead-contaminated dust or other debris/waste. Monitoring of airborne concentrations of lead shall be performed in accordance with 29 CFR 1910.1025. Lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing which may produce airborne concentrations of lead particles shall be collected and disposed of at an approved hazardous waste treatment, storage, or disposal facility.

Any PCB-containing equipment, fluorescent lights containing mercury vapors, or other hazardous building materials shall also be removed and disposed of in accordance with applicable regulations.

By adhering to the above-listed VA Standard Specifications and other regulations and requirements, adverse effects due to potential health and environmental hazards of ACMs, LBP, PCBs, and other hazardous materials in buildings and structures to be demolished would be minimized to the extent required by law, and the release of any such substances would be unlikely.

**Underground Storage Tank Removals and Regulatory Actions**

The State Water Resources Control Board GeoTracker database includes two closed remediation cases on the project site.

- SL0604184618, Military Cleanup Site: Polychlorinated Bi-Phenyls (PCBs), Completed-Case Closed as of May 24, 2007, Removal Action Complete (excavation) as of April 15, 2010.
- T0604100204, Military Cleanup Site: Diesel, Completed-Case Closed as of July 26, 1994
No known underground storage tanks (USTs) exist on the project site. Records included on the GeoTracker database indicate two closed leaking underground storage tank cases on the properties to the south across Liberty Ship Way.

As a result of former uses of the project site, the site is currently defined by the California Department of Toxic Substances Control as a Category 4 property, which is a property where release of hazardous materials has occurred and all removal actions necessary to protect human health and the environment have been taken. Land use restrictions for Category 4 properties require that they remain as a commercial and/or industrial use – uses such as day care centers, elder care centers, hospitals, schools for persons under 21, and residences are prohibited.

The Proposed Action would require minimal excavation – no more than 12 inches deep – for the installation of the modular buildings. Additionally, the Proposed Action would not require the use of groundwater. Therefore, the Proposed Action would not create an adverse effect to the environment relative to contamination from USTs or past cleanup activities.

Release of Hazardous Materials

Naturally occurring asbestos can be encountered in Franciscan ultramafic rock (primarily serpentinite) or Franciscan mélange. As discussed in Section 3.5, Geology and Soils, the underlying geology of the project site consists primarily of artificial fill, which typically includes mixtures of gravel, sand, clay, and silt typically deposited by human activity. Franciscan ultramafic rock, including serpentinite, is not mapped in the vicinity of the site.

In addition, Open File Report 2000-19, entitled *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos* (CDC 2000). This report shows the areas more likely to contain natural occurrences of asbestos in California. According to this map, no ultramafic rock units occur in the area of the project site; therefore, naturally occurring asbestos is not likely to be encountered. Grading association with installation of the modular buildings under the Proposed Action would not result in the release of hazardous naturally occurring asbestos into the environment.

Operation

Solid Waste Disposal

As summarized in Section 2.2 (Proposed Action), implementation of the Proposed Action would result in approximately 75 full-time employees at the project site. The California Department of Resource Recycling and Recovery (CalRecycle) provides solid waste generation rates for various types of land uses. For “institutional” establishments, such as a government office use, the generation rate would be 0.59 tons per employee per year. At this rate, the Proposed Action would generate approximately 44.25 tons of solid waste per year. As noted above, the Keller Canyon Landfill has sufficient permitted capacity to meet future solid waste disposal needs generated in the modular buildings. Therefore, solid waste disposal needs under the Proposed Action would not adversely affect landfill capacity.

Hazardous Materials

Completion of the Proposed Action would have a beneficial overall effect as it would remove ACMs, LBP, PCBs, and other hazardous materials from the exterior of the Machine Shop and from the site. During operation (i.e., occupation of the modular buildings), the interior of the Machine Shop would be closed to general access.
Permanent activities under the Proposed Action that would store and use hazardous materials would be minimal. Such materials could include, but not be limited to, printer supplies, small amounts of cleaning supplies, and very small amounts of first aid materials. The Proposed Action would be subject to the VA SSPP, which includes guidance on reducing the use and disposal of hazardous materials. By complying with the VA SSPP, activities under the Proposed Action would not result in substantial adverse public or environmental hazards through the routine transport, use, or disposal of hazardous materials, or reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

3.12.3.2 No Action Alternative

Under the No Action Alternative, none of the changes to the site proposed under the Proposed Action would occur. No additional short-term effects related to removal and disposal of hazardous building materials and underground fuel tanks would occur. However, the suspected hazardous asbestos and lead-containing materials on the exterior of the Machine Shop would remain. This would not meet the VA’s need to remediate and stabilize this structure for future use. This alternative would not reduce the potential adverse effect of potential contamination resulting from hazardous materials.
3.13 Transportation and Parking

**IMPACTS**

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**ATTRIBUTES**

- ☑ ALTERATION OF PUBLIC TRANSPORTATION
- ☑ ALTERATION OF FACILITY ACCESS ROADS
- ☑ ADVERSE
- ☒ BENEFICIAL
- ☑ ALTERATION OF EXISTING ON-SITE ROADS OR PARKING
- ☑ CONSTRUCTION OF NEW ROADS OR PARKING
- ☑ CONSTRUCTION TRAFFIC
- ☑ LONG TERM
- ☑ SHORT TERM
- ☑ CUMULATIVE

3.13.1 Affected Environment

3.13.1.1 Regional and Local Roadways

U.S. Highway 101 (US 101) provides regional access to/from Sausalito and southern Marin County. Access to/from US 101 is via the Sausalito/Marin City interchange, approximately 1.25 miles north of the project site. The site is accessed from US 101 via Bridgeway Boulevard south approximately 1.0 mile to Marinship Way, then Liberty Ship Way. Bridgeway Boulevard also provides the main access from the site to downtown Sausalito. The intersection of Bridgeway and Marinship Way is controlled by a standard three-phase traffic light.

There are currently two entrances to the site, from Liberty Ship Way and Marinship Way. The access point on Marinship Way is currently used by the neighboring Bay Model facility. The second entrance is located on the southern site border from Liberty Ship Way. This is the most direct access to the Machine Shop and future modular building site.

As the site is currently not used, this is no dedicated circulation pattern on-site. The site currently has approximately 10 parking spaces on the site, though the formal space markings are faded.

3.13.1.2 Local Roadway Level of Service

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents operations with very low delay and LOS F represents delays that are unacceptable to most drivers (Transportation Research Board 2010).

The LOS threshold in the City of Sausalito is LOS C. The most recent LOS calculations conducted for intersections closest to the project site were performed for a traffic study for the Lycee Francais school in 2012-13 and generally for the City in April and May, 2013 (City of Sausalito 2013c, 2013d). The Lycee Francais analysis included two intersections along Bridgeway Boulevard between US 101 and the project site: Bridgeway and Ebbtide Avenue/Gate 5 Road and Bridgeway and Coloma Street. This study found the existing level of service at the Bridgeway and Ebbtide Avenue/Gate 5 Road intersection to be...
operating at LOS B during the AM and PM peak periods. The existing level of service at the Bridgeway and Coloma Street intersection was found to be operating at LOS A during the AM and PM peak periods. The City’s counts focused on the intersection of Bridgeway Boulevard, Gate 6 Road, and North Bridge Boulevard (i.e., US 101 Sausalito/Marin City exit). This intersection was found to operate at LOS B, though this was not assigned to a peak period. Therefore, these intersections currently operate satisfactorily in accordance with LOS thresholds in the City of Sausalito.

3.13.1.3 Marin County Congestion Management Plan

In Marin County, the Transportation Authority of Marin (TAM) is designated as the Congestion Management Agency, which adopts, formally amends, and readopts a Congestion Management Program (CMP) every two years for regional highways. The nearest designated corridors to the project site are US 101 [from the Sonoma to San Francisco county lines] and Bridgeway/Second Street/Alexander Avenue. The nearest US 101 segment to the site is Segment 3A [from the San Francisco County Line to State Route 1]. The LOS standard for Segment 3A on US 101 is LOS E. According to the 2013 Marin County CMP Update, the segment currently operates at LOS E (TAM 2013). The Bridgeway/Second Street/Alexander Avenue corridor has a standard of LOS D. This corridor currently operates at LOS C in the northbound direction and at LOS A in the southbound direction. Since 2013, there have been no projects executed within either corridor to address congestion issues. It should be noted, however, that the Golden Gate Bridge Highway and Transportation District installed a moveable “zip median” on the Golden Gate Bridge and its approaches in January, 2015. As part of that project, the speed limit on southbound US 101 was decreased from 55 miles per hour (mph) to 45 mph from the Waldo Tunnel to the bridge. Both corridors terminate in this area. At the time of this analysis, there is no confirmed evidence that the median project has affected traffic conditions in either corridor.

3.13.1.4 Public Transit, Pedestrian, and Bicycle Facilities

Marin Transit and Golden Gate Transit operate fixed-route and paratransit (Marin Access) bus service in Marin County and the city of Sausalito. Marin Transit Routes 17 and 61 (Stagecoach) currently pass by the project site on Bridgeway Boulevard. The both routes share stops at Bridgeway and Marinship Way. Golden Gate Transit Routes 2, 4, 10, 70, and 92 also traverse Bridgeway Boulevard through the project area (Golden Gate Transit, 2014). The nearest multi-route/multi-provider transfer point is at Marin City near US 101 approximately 1.5 miles north of the project site. Riders using other transit providers can transfer to the Marin Transit routes serving the project site at this point. Additionally, both soft-wheel transit options provide direct connections to the Golden Gate ferry terminal and service approximately 1.0 mile to the south. This ferry service provides connection to San Francisco at the Ferry Building at the foot of Market Street.

Sidewalks and walkways are provided around the project site and connect to sidewalks along Bridgeway Boulevard. Class II bike lanes are provided along both lanes of Bridgeway in the project area. No bike lanes are marked on Marinship Way and Liberty Ship Way, although the city’s 2008 Bicycle Master Plan shows a Class I bike lane on the portion of Marinship Way leading to the project site (City of Sausalito, 2008). This plan also shows a proposed Class III bike lane to be installed along Marinship Way north from the project site and neighboring Bay Model.
3.13.2 Assessment Methods

This impact assessment includes an evaluation of the potential for the Proposed Action to have short-term or long-term impacts on roadways, parking, emergency access, or on the safety of vehicular traffic, bicyclists, or pedestrians at the campus. As the Proposed Action would bring approximately 75 employees at the site – which is below the City of Sausalito’s threshold in its trip reduction ordinance (i.e., 100 employees), a traffic impact study was not completed.

3.13.3 Environmental Consequences

3.13.3.1 Proposed Action

Construction

Construction activities to occur under the Proposed Action would include removal of existing siding from the Machine Shop, delivery and installation of new siding, delivery and installation of the modular buildings, and installation of an 8-inch sanitary sewer main in Libertyship Way to connect the modular buildings to the existing main. During construction, worker vehicles and haul trucks are anticipated to enter and leave the site via Liberty Ship Way and Marinship Way from Bridgeway Boulevard. Equipment and materials staging are anticipated to be on the project site.

Construction traffic would result in a short-term increase in construction-related vehicle trips on US 101, Bridgeway Boulevard, Marinship Way, and Liberty Ship Way. Construction would result in vehicle trips by construction workers, haul-truck trips for disposal of demolition debris, and material, equipment, and modular building deliveries to the site. The estimated size of the construction workforce at any one time during construction is anticipated to range between six to 10 workers. The number of construction-related vehicles traveling to and from the campus would vary on a daily basis; however, the heaviest traffic days would occur when demolition debris is hauled off-site for disposal. If the deliveries and haul trucks were to occur during peak hours, it may have moderate impacts on traffic flow on surrounding roadways.

On-site construction activities would also eliminate the existing parking spaces along the south side of the Bay Model from use. The spaces are currently used by Bay Model employees and visitors. This area would be used for on-site circulation and materials/equipment storage.

Because construction activities would temporarily alter the normal functionality of roadways at the site, the potential exists for a short-term decrease in the performance and safety of road, transit, bicycle, and pedestrian facilities during construction. This would include lane closures [for sewer main installation], the potential for conflicts between construction vehicles (with slower speeds and wider turning radii than autos) and vehicles, conflicts with transit vehicles [which tend to be larger], bicyclists, or pedestrians sharing roadways; confusion or frustration of drivers related to construction activities; and confusion of bicyclists and pedestrians due to potential temporary alterations in bicycle and pedestrian access and circulation.

To reduce potential adverse effects on traffic flows and safety hazards during construction activities, the following mitigative action addresses these potential issues.

Mitigative Actions – Construction-Period Transportation

The VA shall require contractor(s) to submit and adhere to a VA-approved traffic control plan for the proposed construction activities at and adjacent to the site. The plan shall include measures that address:
• overlapping construction schedules and activities, including lane closures,
• truck arrivals and departures,
• circulation and potential detour plans for vehicles, pedestrians, and bicycles;
• flaggers and/or signage to guide vehicles around the construction activities;
• construction parking and materials/equipment storage; and
• emergency vehicle access.

The VA and the construction contractor shall schedule delivery trucks and haul trucks during off-peak hours (9:00 AM to 4:00 PM) to minimize impacts on peak hour traffic.

The VA or the contractor shall consult with local traffic, transit, and emergency service agencies and shall provide notification in advance of the timing, location, and duration of construction activities and the locations of detours, lane closures, and bus stop closures (if necessary). Detours shall be included for bicycles and pedestrians in all areas potentially affected by construction.

The VA and its contractor(s) shall also ensure that fire truck and emergency vehicle access is maintained to all buildings at and adjacent to the site. Detours, if needed, shall be clearly marked in all areas potentially affected by construction to avoid confusion. The VA shall require contractor(s) to have ready at all times the means necessary to accommodate access by emergency vehicles to/from the site and through affected intersections, as needed.

Additionally, equipment and materials shall be stored in a designated contractor on-site staging area in such a manner to minimize obstruction of traffic traversing the site from the adjacent Bay Model. Locations shall be identified for parking by construction workers, either within the staging area or, if necessary, at a nearby location with transport provided between the parking location and the worksite.

The VA shall develop a shared parking agreement with the U.S. Army Corps of Engineers, as owner/operator of the Bay Model, to provide adequate parking for Bay Model employees and visitors during the construction period on the Machine Shop site.

With implementation of this traffic control plan and the additional mitigative actions, potential adverse effects on traffic and safety hazards would be minimized, and construction of the Proposed Action would not result in substantial adverse effects on traffic and pedestrian and bicycle access.

City of Sausalito Municipal Code includes a number of ordinances covering construction activities and in-street work for private projects. Although Federal agencies are not bound by local regulation, and in this case the local regulation does not address publicly-funded projects, the VA will – to the extent practicable – abide by those which would apply to similar projects. Therefore, the VA would take necessary steps to keep public roadways and sidewalks affected by project construction unobstructed and clear of sand, dirt, gravel, etc.

**Operation**

**Transportation**

Operation-related vehicle trips generated at the campus would increase under the Proposed Action. As summarized in Section 2.2, implementation of the Proposed Action would result in an increase of 8,000 square feet building space at the project site. The new modular buildings proposed under the Proposed
Action would generally provide support space for services currently present at the SFVAMC campus. No occupancy is proposed for the Machine Shop. Approximately 75 staff would be transferred from the SFVAMC campus in San Francisco to the project site.

Based on the Institute for Traffic Engineers (ITE) land code for single tenant office building and the anticipated 75 employees, the Proposed Action would be expected to generate 56 trips in the AM peak hour and 67 trips in the PM peak hour (ITE 2012). Approximately 89 percent of the trips in the AM peak hour would be entering the site, while approximately 85 percent of the trips in the PM peak hour would be exiting the site. It is assumed that all of the traffic volumes generated by the Proposed Action would access the site to/from Bridgeway Boulevard and the majority of these vehicles would further access US 101 via the Sausalito/Marin City interchange.

When considered with traffic counts performed for the City of Sausalito in 2013, the addition of traffic volumes generated by the Proposed Action would represent a 2.5 to 3.5 percent increase in the traffic volumes along Bridgeway Boulevard. The traffic analysis performed with the Lycee Francais school determined that the maximum average control delay experienced along Bridgeway Boulevard is currently 24.3 seconds per vehicle, which occurs at the intersection of Bridgeway Boulevard and Gate 6 Road/North Bridge Boulevard/US 101 ramps. Based on the city’s threshold of LOS C, in order for the Proposed Action to impose a substantial impact upon Bridgeway Boulevard, this intersection would need to increase to a level of average control delay beyond 35 seconds per vehicle. It is not anticipated that a 2.5 to 3.5 percent increase in traffic volumes would cause an increase in average control delay of more than 10 seconds per vehicle. Therefore, the effect of the Proposed Action to Bridgeway Boulevard is not anticipated to be adverse.

Based on the traffic volumes tabulated with the Caltrans traffic census data compiled in 2012, the addition of traffic volumes generated by the Proposed Action would represent a less than 1.0 percent increase in the traffic volumes along US 101. The Marin County CMP (2013 Update) determined that the LOS experienced along this segment of US 101 is currently LOS E, corresponding to an average travel speed of 43.8 miles per hour. Based on the County’s threshold of LOS E for this segment, in order for the Proposed Action to impose an adverse effect upon US 101, the average travel speed would need to decrease to a level below 30 miles per hour. It is not anticipated that this small increase in traffic volumes would cause a decrease in average travel speed of more than 14 miles per hour. Therefore, the Proposed Action would not have an adverse effect to traffic operations on US Route 101.

With Marin Transit bus stops at the intersection of Bridgeway Boulevard and Marinship Way, the Proposed Action is anticipated to have adequate transit connectivity. These stops provide direct services from the transit transfer point at Marin City and the Sausalito Ferry Terminal connecting with additional transit services offered by Golden Gate Transit. Therefore, there are sufficient transit options to the project site.

Implementation of the Proposed Action would not physically affect pedestrian and bicycle facilities in the area. In fact, the nearby existing and planned facilities would well serve the site.

As noted in Section 2.2, the layout of the modular buildings would provide sufficient turning space for emergency response vehicles, such as ambulances and fire trucks. With the shared parking agreement with the neighboring Bay Model, existing parking would be redistributed and relocated within the two properties to provide a clear access route on the site. Implementation of the Proposed Action would not result in inadequate emergency access.
Parking Capacity

Implementation of the Proposed Action would provide 42 regular and 2 ADA parking spaces on the site. It would also permanently remove existing parking along the south side of the Bay Model building currently used by its employees and visitors. These spaces would not accommodate the approximately 75 employees proposed to work on-site, nor would it adequate replace the parking used by the Bay Model. To reduce potential adverse effects on parking, the following mitigative action addresses these potential issues.

**Mitigative Action – Shared Parking Agreement**

The VA shall develop a shared parking agreement with the U.S. Army Corps of Engineers, as owner/operator of the Bay Model, to provide adequate parking for Bay Model employees and visitors, as well as VA staff and visitors working on the project site. This plan shall identify parking opportunities on either property, preserve access for emergency response vehicles and tour buses, and provide sufficiently-located handicap parking spaces.

With implementation of this shared parking agreement, potential adverse effects to on-site parking would be minimized; the Proposed Action would not result in lasting substantial adverse effects due to inadequate parking supply.

**3.13.3.2 No Action Alternative**

Under the No Action Alternative, none of the changes to the site proposed under the Proposed Action would occur. Therefore, this alternative would result in no additional short-term effects on traffic and parking typical of construction activities would occur. In addition, no work within the City of Sausalito’s right-of-way would occur and the existing transit stop at the campus would not be temporarily affected. Under this alternative, existing internal circulation and parking constraints with the SFVAMC campus in San Francisco would persist. Therefore, the No Action Alternative would not result in new construction or operation-related effects on traffic and parking.
3.14 Utilities

IMPACTS

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</table>

ATTRIBUTES

- WATER SYSTEM, SUPPLY
- STORMWATER DRAINAGE
- SEWAGE TREATMENT
- ELECTRICAL
- HEAT GENERATION
- ADVERSE
- BENEFICIAL

INCINERATOR
- AIR CONDITIONING AND REFRIGERATION
- EXCAVATION
- MAINTENANCE AND REPAIR
- CONSERVATION
- LONG TERM
- SHORT TERM
- CUMULATIVE

3.14.1 Affected Environment

3.14.1.1 Electricity and Natural Gas

Electricity and natural gas at the campus is provided by the Pacific Gas and Electric Company (PG&E), which is regulated by the California Public Utilities Commission (CPUC). Natural gas service to the project site is provided by mains in Libertyship Way and another line along the site’s western boundary. Electrical service is provide from an overhead line to the site’s western boundary. At this time, there are no apparent active connections to the site.

3.14.1.2 Water

The water supply to the project site is provided by the Marin Municipal Water District (MMWD). MMWD water supplies come from a combination of local surface water supplies within the county, imported water from the Russian River provided by the Sonoma County Water Agency (SCWA), and recycled water. Surface water is treated at either the Bon Tempe Treatment Plant near Ross or the San Geronimo Treatment Plant in Woodacre. Water imported from SCWA is naturally filtered in the sediments underlying the river and enters the MMWD system at the Ignacio Water Quality and Pumping Station in Novato, where its quality is monitored and treated, as necessary.

California’s Urban Water Management Planning Act requires urban water suppliers that have 3,000 or more connections, or that supply at least 3,000 acre-feet per year of water, to submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources every five years. The purpose of the UWMP is to evaluate whether a water supplier can meet the projected water demands of its customers over a 20- or 25-year planning horizon and under a range of water supply scenarios. According to MMWD’s 2010 UWMP, adequate water supplies are available to meet the projected water demands of customers over a 25-year planning horizon from 2010 to 2035 for normal and dry year scenarios (MMWD 2011).

The project site is served by a number of potable water lines coming into the site from Marinship Way and Libertyship Way.
3.14.1.3 Wastewater

Wastewater collection service within the city limits is provided and maintained by the city of Sausalito, including the project site. Wastewater treatment is provided by the Sausalito-Marin City Sanitary District. The city conveys raw wastewater to the Sanitary District’s treatment plant at Fort Baker, which after treatment discharges to the San Francisco Bay. There is an existing 8-inch sanitary sewer line at the southwestern corner of the project site in Libertyship Way. There is also an abandoned sanitary sewer line along the subject property’s western boundary.

3.14.1.4 Stormwater Drainage Facilities

The site is relatively level and storm water drains away from the Machine Shop building to existing storm drain inlets north and east of the structure. These inlets access two underground storm drains running parallel along the north and south of the sight – an 18-inch conduit on the north between the building and the Bay Model building and a 66-inch conduit in Libertyship Way on the south. These flow toward Richardson Bay.

3.14.2 Assessment Methods

The impact analysis compares projected future conditions to the affected environment and identifies potential construction or operational impacts that can reasonably be anticipated to be caused by, or result from, the Proposed Action and No Action Alternative. The analysis includes evaluation of potential environmental effects resulting from the construction or expansion of electrical, natural gas, water, wastewater, or stormwater utility systems and facilities.

3.14.3 Environmental Consequences

3.14.3.1 Proposed Action

Construction

Construction activities as part of the Proposed Action are limited to rehabilitation of the Machine Shop’s exterior and installation of the modular buildings. Activities associated with the Machine Shop are not anticipated to require new service connections or excavation that might conflict with existing underground utilities. Installation of the modular buildings would require connection to existing utilities. Connections for potable water would come from the existing water line along the northern side of the site. Connections for sanitary sewer would be directed to the existing 8-inch main in Libertyship Way. Connection to the existing main would also require installation of approximately 150 feet of connecting line in Libertyship Way.

Excavation of no more than 12 inches below the existing ground elevation would be required. As part of construction activities, it is assumed that the VA would provide the contractor with current as-builts of the site indicating location of any undergrounded utilities. Also, it is reasonable to expect the construction contractor to contact the 811 “call before you dig” service and conduct other appropriate surveys to ascertain the presence or absence of underground utilities on the project site.

Furthermore, potential adverse effects would be minimized by implementing the requirements for protection of existing utilities outlined in VA Standard Specifications 01 00 00 (General Requirements) and 02 41 00 (Demolition). Required controls include removing, uncovering, and terminating existing utilities in a manner conforming to nationally recognized codes covering the specific utility. If utility lines are encountered that are not marked by the VA or otherwise indicated on drawings, the Resident
Engineer would be notified prior to further work in that area. Where necessary to cut existing utility service pipes, they would be cut and capped at suitable places.

Installation of the modular buildings as part of the Proposed Action would require hydrant connections at the site. The VA and its contractor would need to consult and coordinate with the Sausalito Fire Department prior to the potential installation and/or relocation of hydrants and design such installation and/or relocations in accordance with relevant building and fire codes. To further minimize impacts, the VA and its contractor would notify the Sausalito Fire Department as to the timing, location, and duration of construction activities when fire hydrants are being relocated, should this be necessary. Therefore, through compliance with the VA standard construction specifications, compliance with local requirements and regulations, and minimization measures, construction activities would not result in substantial impacts to existing utilities.

**Operation**

**Electricity, Gas, Water, and Sanitary Sewer**

The proposed operational demands accommodating new administrative office space for 75 employees during Monday to Friday work hours are not anticipated to stress existing utility services. While the modular buildings would not seek to achieve accredit silver rating by the LEED program, they would be equipped with a number of efficiency features minimizing utility usage. This, plus the available capacity indicated above, indicates that operational demands of the Proposed Action would be adequately met by existing service providers and would not require service providers to construct new electricity or gas generation or transmission facilities or new or expanded water or wastewater treatment facilities, other than the installation of connections.

**Stormwater**

Stormwater would be collected in the existing network of drainage inlets and piping on the site and connected to the existing storm drainage in the project area. The installation of modular buildings under the Proposed Action would be designed to meet the requirements set forth in the U.S. EPA’s *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*, as applicable. Therefore, the Proposed Action would not result in the need for construction of new off-site stormwater drainage facilities.

**3.14.3.2 No Action Alternative**

Under this alternative, none of the changes to the site proposed under the Proposed Action would occur. Therefore, the No Action Alternative would not result in new construction or operation-related effects on land uses or utility usage at the site.
4. **Cumulative Impacts**

A cumulative impact is defined as the impact on the environment that could result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions (Section 1508.7 of the CEQ regulations). Cumulative impacts can result from individually minor, but collectively significant, actions that take place over time. The following three criteria were used to develop a list of relevant past, present, and reasonably foreseeable future projects to be considered in the cumulative analysis:

1. Other projects, including other VA and non-VA actions, that could contribute incremental environmental effects on the same resources as the Proposed Action and that would have similar impacts to those discussed in this EA.

2. Other projects that are or would be located within and/or adjacent to the project site, or that would have effects on similar regional resources such as roadways.

3. Projects that could contribute environmental effects that coincide in timing and duration with the Proposed Action either during construction (short-term) or operation (long-term).

There are no other VA or Federal agency actions occurring within an area of the Sausalito site that would cumulatively contribute to environmental impacts. Likewise, there are no other projects physically located on or adjacent to the project site which would have a cumulative environmental effect. The City of Sausalito was contacted to obtain information on any potential projects within its limits which could have a cumulative bearing on potential environmental effects relative to the Proposed Action. Research of City records presented the following projects currently planned:

- **Bridgeway Condominiums:** 1755 Bridgeway, 16-unit residential condominium development involving the demolition of existing structures and construction of two structures with enclosed parking approximately 0.25 mile from the subject site.

- **Valhalla Residential Condominiums:** 201 Bridgeway, 7-unit condominium in an existing structure, approximately 1.6 miles from the subject site.

- **Woodrow Retaining Wall:** 9 Edwards, retroactive approval of a constructed retaining wall, approximately 1.9 miles from the subject site.

- **Marinship Specific Plan Area:** Includes subject property and considered in the Proposed Action's analysis of Land Use (see Section 3.2)

Given the small nature and distance from the Machine Shop site, the Valhalla and Woodrow projects would not have potential adverse effects to the environmental that would be cumulative when considered with the Proposed Action. As the Machine Shop site is located within the Marinship Specific Plan Area – which includes other Federal properties – the VA would consider the potential effects of the Proposed Action in the context of the Specific Plan as a participant in that process.

Based on the treatment of these projects, the Proposed Action would not have a cumulatively considerable effect on the human and physical environments.
5. Other Required Analyses for NEPA

5.1 Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-Term Productivity

The Proposed Action would stabilize and renovate the existing Machine Shop on the project site, as well as install three modular buildings to house VA administration functions. Short-term use of the environment during construction would involve removal of existing siding, installation of new siding, limited excavation, paving, utility installation, and other activities.

No known sensitive environmental resources would be affected by construction, such as wetlands, waters, coastal zones, or critical habitat for any endangered or threatened species. The Proposed Action would require tree removal. However, the trees to be removed are identified as undesirable by the City of Sausalito. The VA would work with the City to determine how the trees could be replaced to the mutual benefit of both parties.

Slight and temporary disruption of traffic patterns due to construction-related activities can be anticipated. However, these disruptions would be brief. The construction period would generate limited economic productivity in terms of new construction jobs.

Over the long-term, continued use of the project site would enhance the long-term productivity of the Federal government by providing enhanced health care services to Veterans and their families. The Proposed Action would transfer current administrative functions from the main SFVAMC campus to this project site, creating additional space at the SFVAMC for actual health care facilities.

5.2 Irreversible and Irretrievable Commitment of Resources

Construction activities under the Proposed Action would result in both direct and indirect commitments of resources. In some cases, the resource committed would be recovered within a relatively short period of time. In others, resources would be irreversibly or irretrievably committed by virtue of being consumed. For example, construction activities under the Proposed Action would require the commitment of various construction materials, including cement, cement board, aggregate, steel, asphalt, lumber and other building materials. However, much of the material dedicated to construction may be recycled at some future date. Construction activities under the Proposed Action would also require the use of fuels and electrical energy for a variety of construction activities and vehicle travel to and from the project site. These should be considered irretrievably committed to the Proposed Action.

Over the long-term, implementation of the Proposed Action would result in an overall net increase of approximately 30,000 gross building space available to the VA at the SFVAMC and satellite sites (i.e., Sausalito) once the agency develops a long-term plan for the Machine Shop structure. However, the additional space is small relatively to the current SFVAMC space inventory and would not result in a substantial increase in operation-related demands for resources such as electricity, gas, and water.

5.3 Potential for Generating Substantial Controversy

Executing the Proposed Action could generate controversy related to the city’s and community’s interest in the site’s contribution to local history, as well as short-term increases in construction-related noise and traffic, parking distribution, and other nuisances typical of construction activities. In many cases,
construction-related effects are minimized through compliance with VA standard specifications and Federal, state and local regulations. Mitigative actions are also included to minimize effects. For example, such efforts would include implementing a construction-period traffic control plan to minimize disruption to the various transportation modes at or near the project site; reducing construction-related noise; developing and implementing a plan to preserve the integrity of the Machine Shop as a historic resource; and more.

Over the long-term, the Proposed Action would have a beneficial effect on the SFVAMC campus by providing more space for health services, plus improving access, visibility, historic context, and appearance of the site, resolving ADA deficiencies, and the overall usefulness and marketability of the site.
6. References


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7. List of Preparers

Department of Veterans Affairs
Matthew Szeto, Program Manager
Chanh Lam, Program Manager

GHD Inc.
James Alcorn, AICP, B.A. Geography, Author
Brian Bacciarini, B.S. Environmental Studies, Author
Christopher Benjamin, B.S. Environmental Engineering, Author
Tobin Bonnell, B.S. Civil Engineering - Transportation, Author
David D. Davis, AICP, M.S./B.S. Geography, Project Manager, QA/QC
Carol Kielusiak, RPA, M.A./B.A. Anthropology, Author
Chelsea Phlegar, M.U.R.P Urban and Regional Planning, B.A. English, B.A. Political Science, Author
Elissa Overton, Certificate, Business Management, Administration
Katherine Wall, B.A. Environmental Studies - Planning & Sociology, Author

Interactive Resources
Kimberly Butt, AIA, M.S. Architecture, Author
Appendix A: Special-Status Species in the Project Vicinity
### Table A-1: Special-Status Species in the Project Vicinity

<table>
<thead>
<tr>
<th>Common Name Scientific Name</th>
<th>Federal Status</th>
<th>State Status</th>
<th>CNPS Listing</th>
<th>General Habitat Description</th>
<th>Potential to Occur in Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INVERTEBRATES</strong></td>
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<tr>
<td>Callippe Silverspot Butterfly *Speyeria callippe callippe*</td>
<td>Endangered</td>
<td>None</td>
<td>None</td>
<td>Grassy hills surrounding San Francisco Bay that support its native host-plant, <em>Viola pedunculata</em>.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Mission Blue Butterfly <em>Aricia icarioides missionensis</em></td>
<td>Endangered</td>
<td>None</td>
<td>None</td>
<td>Requires a host plant and appropriate nectar plants in a coastal grassland habitat. The host plants utilized by the Mission blue are silver lupine (<em>Lupinus albifrons</em>), summer lupine (<em>Lupinus formosus</em>), and varicolor lupine (<em>Lupinus varicolor</em>). Nectar plants include various composites (<em>Asteraceae</em>) that grow in association with the lupines.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Myrtle’s Silverspot Butterfly <em>Speyeria zerene myrtleae</em></td>
<td>Endangered</td>
<td>None</td>
<td>None</td>
<td>Sand dune and coastal prairie habitat.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td><strong>FISHES</strong></td>
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<tr>
<td>Delta Smelt <em>Hypomesus transpacificus</em></td>
<td>Threatened</td>
<td>Endangered</td>
<td>None</td>
<td>Endemic to California; occurs only in the brackish and freshwaters of the Sacramento-San Joaquin River Delta. Exhibits seasonal migration within the estuary (Suisun Bay, Carquinez Strait and San Pablo Bay), moving upstream before spawning.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
</tbody>
</table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Longfin smelt</strong> <em>Spirinchus thaleichthys</em></td>
<td>None</td>
<td>Threatened, Species of Special Concern</td>
<td>None</td>
<td>Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td><strong>Steelhead</strong> <em>Oncorhynchus mykiss</em></td>
<td>Threatened</td>
<td>None</td>
<td>None</td>
<td>Anadromous, migrates through San Francisco Bay, spawns in coastal rivers and creeks.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td><strong>Tidewater Goby</strong> <em>Eucyclogobius newberryi</em></td>
<td>Endangered</td>
<td>None</td>
<td>None</td>
<td>Found primarily in waters of coastal lagoons, estuaries, and marshes, often in sandy shallows with low salinity levels.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td><strong>AMPHIBIANS</strong></td>
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<tr>
<td><strong>California Red-legged Frog</strong> <em>Rana draytonii</em></td>
<td>Threatened</td>
<td>None</td>
<td>None</td>
<td>Marshes, stream pools, reservoirs, ponds. Uses both riparian and upland habitats for foraging, shelter, cover, and non-dispersal movement (Recovery Plan 2010).</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td><strong>REPTILES</strong></td>
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<tr>
<td><strong>Alameda Whipsnake</strong> <em>Masticophis lateralis euryxanthus</em></td>
<td>Threatened</td>
<td>Threatened</td>
<td>None</td>
<td>Habitat includes valley-foothill hardwood habitat of the Coast Ranges between Monterey and San Francisco Bay. Species inhabit south-facing slopes and ravines where shrubs form a vegetative mosaic with oak trees and grasses.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Common Name</td>
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</tr>
<tr>
<td>Marin Dwarf-flax</td>
<td>Hesperolinon congestum</td>
<td>Threatened</td>
<td>Threatened</td>
<td>1B (Plants Rare, Threatened, or Endangered in California or Elsewhere)</td>
<td>Serpentine. Chaparral and valley and foothill grassland. Blooms April-July.</td>
</tr>
<tr>
<td>Presidio Clarkia</td>
<td>Clarkia franciscana</td>
<td>Endangered</td>
<td>Endangered</td>
<td>1B (Plants Rare, Threatened, or Endangered in California or Elsewhere)</td>
<td>Found on serpentine bluffs and serpentine grasslands in open sunlit areas.</td>
</tr>
<tr>
<td>Presidio Manzanita</td>
<td>Arctostaphylos hookeri ravenii</td>
<td>Endangered</td>
<td>Endangered</td>
<td>1B (Plants Rare, Threatened, or Endangered in California or Elsewhere)</td>
<td>Open scrub areas on serpentine soils.</td>
</tr>
<tr>
<td>San Francisco Lessingia</td>
<td>Lessingia germanorum</td>
<td>Endangered</td>
<td>Endangered</td>
<td>1B (Plants Rare, Threatened, or Endangered in California or Elsewhere)</td>
<td>Coastal scrub (remnant dunes)</td>
</tr>
</tbody>
</table>
### Table A-1: Special-Status Species in the Project Vicinity

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</tr>
</thead>
<tbody>
<tr>
<td>white-rayed Pentachaeta Pentachaeta bellidiflora</td>
<td>Endangered</td>
<td>Endangered</td>
<td>1B (Plants Rare, Threatened, or Endangered in California or Elsewhere)</td>
<td>Cismontane woodland, Valley and foothill grassland (often serpentinite)</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>California clapper rail Rallus longirostris obsoletus</td>
<td>Endangered, State Fully Protected</td>
<td>None</td>
<td>Salt marshes and brackish marshes traversed by tidal sloughs in the vicinity of the San Francisco Bay. Associated with Salicornia and Spartina spp.- dominated salt marshes.</td>
<td>No suitable habitat located in the Project area.</td>
<td></td>
</tr>
<tr>
<td>California least tern Sternula antillarum browni</td>
<td>Endangered</td>
<td>Endangered, State Fully Protected</td>
<td>None</td>
<td>Abandoned salt ponds and along estuarine shores in San Francisco Bay. Feeds primarily in shallow estuaries or lagoons where small fish are abundant.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Marbled Murrelet Brachyramphus marmoratus</td>
<td>Threatened</td>
<td>Endangered</td>
<td>None</td>
<td>Nest in old-growth forests and feed in the Pacific Ocean. Prefer large areas of coastal and near coastal old-growth forest.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Short-tailed Albatross Phoebastria albatrus</td>
<td>Endangered</td>
<td>None</td>
<td>None</td>
<td>The short-tailed albatross lives on the open ocean waters and islands.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
<tr>
<td>Common Name</td>
<td>Scientific Name</td>
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</tr>
<tr>
<td>Western Snowy Plover</td>
<td><em>Charadrius alexandrinus nivosus</em></td>
<td>Threatened</td>
<td>State Species of Special Concern</td>
<td>None</td>
<td>Sandy beaches, large alkali lake shorelines, salt pond levees, dunes. Require sandy, gravelly or friable soils for nesting.</td>
</tr>
</tbody>
</table>

MAMMALS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Federal Status</th>
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</thead>
<tbody>
<tr>
<td>Salt Marsh Harvest Mouse</td>
<td><em>Reithrodontomys raviventris</em></td>
<td>Endangered</td>
<td>Endangered</td>
<td>None</td>
<td>Endemic to salt and brackish marshes of San Francisco, San Pablo, and Suisun bays. Pickleweed is primary habitat. Requires upland areas for flood escape.</td>
<td>No suitable habitat located in the Project area.</td>
</tr>
</tbody>
</table>

| Southern Sea Otter | *Enhydra lutris nereis* | Threatened | None | None | Kelp Forest | No suitable habitat located in the Project area. |