



White Wolf Lodge Rehabilitation

Environmental Assessment / Assessment of Effect
February 2012



EXECUTIVE SUMMARY

The National Park Service at Yosemite National Park and Delaware North Companies Parks & Resorts at Yosemite, Inc., the park concessioner, are developing a rehabilitation plan for the White Wolf Lodge Main Lodge building and two Duplex Cabins. The Main Lodge building, containing kitchen and dining functions, and Duplex Cabins 1/2 and 3/4 are part of a larger facility which includes twenty-four tent cabins, service structures, and a shared bathhouse. The rehabilitation plan focuses solely on the Main Lodge building, two Duplex Cabins, adjoining service structures, and their immediate surroundings. Rebuilt in 1969, the Main Lodge building has been determined eligible for listing in the National Register of Historic Places; the Duplex Cabins are being treated as potentially eligible by the National Park Service.

The primary goals of the rehabilitation are to make necessary modifications to the Main Lodge building, Duplex Cabins, and immediate surroundings to meet the park's universal access requirements, improve and repair flooring and foundations for the Main Lodge building and two Duplex Cabins, improve the Main Lodge building kitchen service flow, and address a number of snow load and site drainage issues to minimize further weather-related damage to the structures and paths.

PURPOSE AND NEED

The purpose of the White Wolf Lodge rehabilitation project is to improve the structural stability, accessibility, and operational efficiency of the Main Lodge building and Duplex Cabins, and thereby improve visitor experience. The project is needed to rehabilitate deteriorated structural components of the Main Lodge building and cabins and improve accessibility for mobility-impaired visitors and staff in accordance with the Architectural Barriers Act and the *Americans with Disabilities Act Accessibility Guidelines*. The National Park Service has prepared this environmental assessment identifying and evaluating two alternatives for the rehabilitation of White Wolf Lodge: Alternative 1, the No Action Alternative, and Alternative 2, Rehabilitation of White Wolf Lodge (Preferred Alternative). If the Preferred Alternative is selected, rehabilitation would be expected to begin in the summer of 2014, and be completed in phases depending on funding.

RELATIONSHIP TO OTHER PLANS

The *White Wolf Lodge Rehabilitation Environmental Assessment / Assessment of Effect* is an implementation plan tiered from the 1980 *Yosemite National Park General Management Plan*. Goals and objectives in the 1980 general management plan that relate to the White Wolf Lodge rehabilitation project include actions that promote visitor understanding and enjoyment.

OVERVIEW OF THE ALTERNATIVES

This environmental assessment / assessment of effect presents and analyzes two alternatives, which are described in Chapter 2. Alternative 1, the No Action Alternative, represents continuation of the existing operations and maintenance of White Wolf Lodge. Alternative 2, Rehabilitation of White Wolf Lodge, is the action alternative and is the National Park Service's Preferred Alternative. This action alternative represents the means to satisfy the purpose of and need for the project, while also meeting relevant legal requirements and project goals.

The primary aspects of the rehabilitation are to make necessary modifications to the Main Lodge building, Duplex Cabins, and immediate surroundings to meet the park's universal access goals; improve and repair the flooring, foundations, and roofing at the Main Lodge building and the Duplex Cabins; improve operational efficiency; provide an addition to the Main Lodge for two self-contained cold-storage units for kitchen operations; and address a number of snow load and site drainage issues to minimize further weather-related damage to the structures and paths. Accessibility improvements would include an accessible cabin to accommodate guests with mobility challenges,

an accessible path of travel to both the Main Lodge building and the accessible Duplex Cabin, and a new accessible restroom to accommodate both day visitors and Lodge users.

ENVIRONMENTAL ANALYSIS

Chapter 3 of this document presents the Affected Environment and the Environmental Consequences. The Affected Environment section under each resource topic discussed in Chapter 3 describes the existing conditions. The Environmental Consequences section under each resource topic discussed in Chapter 3 analyzes the potential environmental impacts associated with each of the alternatives described in Chapter 2.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Council on Environmental Quality regulations implementing the National Environmental Policy Act and National Park Service guidelines require that “the alternative or alternatives which were considered to be environmentally preferable” be identified. Environmentally preferable is defined as “the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources” (CEQ 1981). Upon full consideration of the elements of Section 101 of the National Environmental Policy Act, Alternative 2 represents the environmentally preferable alternative. This conclusion is analyzed in detail in Chapter 2.

ASSESSMENT OF EFFECT

Alternative 2 proposes a rehabilitation program for the Main Lodge building and Duplex Cabins that includes new construction, structural, weather envelope, life-safety, and electrical systems upgrades, as well as improved Americans with Disabilities Act accessibility and improved operational efficiencies. However, the proposed activities would alter some of the characteristics that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Under Alternative 2, the addition to Duplex Cabin 1/2 would be considered an adverse effect under Section 106 of the National Historic Preservation Act.

CONSULTATION AND COORDINATION PROCESS

The White Wolf Lodge rehabilitation project was presented to the public at park open houses on July 27 and August 31, 2011, and a public scoping period was conducted from August 15 through September 5, 2011. Internal scoping and consultation with other government agencies, including the U.S. Fish and Wildlife Service and California State Historic Preservation Office, and American Indian governments and organizations also guided the planning process. The public outreach called for in Section 106 of the National Historic Preservation Act was integrated with the National Environmental Policy Act process, in accordance with the *Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations, and Maintenance, Yosemite National Park, California* (NPS, California SHPO, and ACHP 1999).

In addition to determining the environmental consequences of the preferred and other alternatives, *Management Policies 2006* and *Director’s Order-12: Conservation Planning, Environmental Impact Analysis, and Decision-making* require analysis of potential impacts to determine if actions would impair park resources. Impact analysis for historic properties is based on National Historic Preservation Act, Title 36 of the Code of Federal Regulations Part 800 (36 CFR 800) criteria of effect, as described separately below. The impairment determination will be included as an attachment to the FONSI.

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CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

White Wolf Lodge is a recreational and historical attraction for park visitors traveling along Tioga Road (figure 1). The White Wolf Lodge rehabilitation project under consideration is intended to address various needs, including foundation, siding, roof, and interior work on three structures, while also improving compliance with the Architectural Barriers Act of 1968, the Americans with Disabilities Act of 1990 Accessibility Guidelines, and *Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services*. This environmental assessment evaluates and describes the potential impacts of the project on various park resources. It provides comprehensive mitigation measures to minimize any impacts on the physical, biological, cultural, and social environment. This environmental assessment /assessment of effect has been prepared to satisfy the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190, 42 United States Code 4321–4347, as amended); the National Historic Preservation Act; National Park Service *Management Policies 2006*, and other applicable laws and directives.

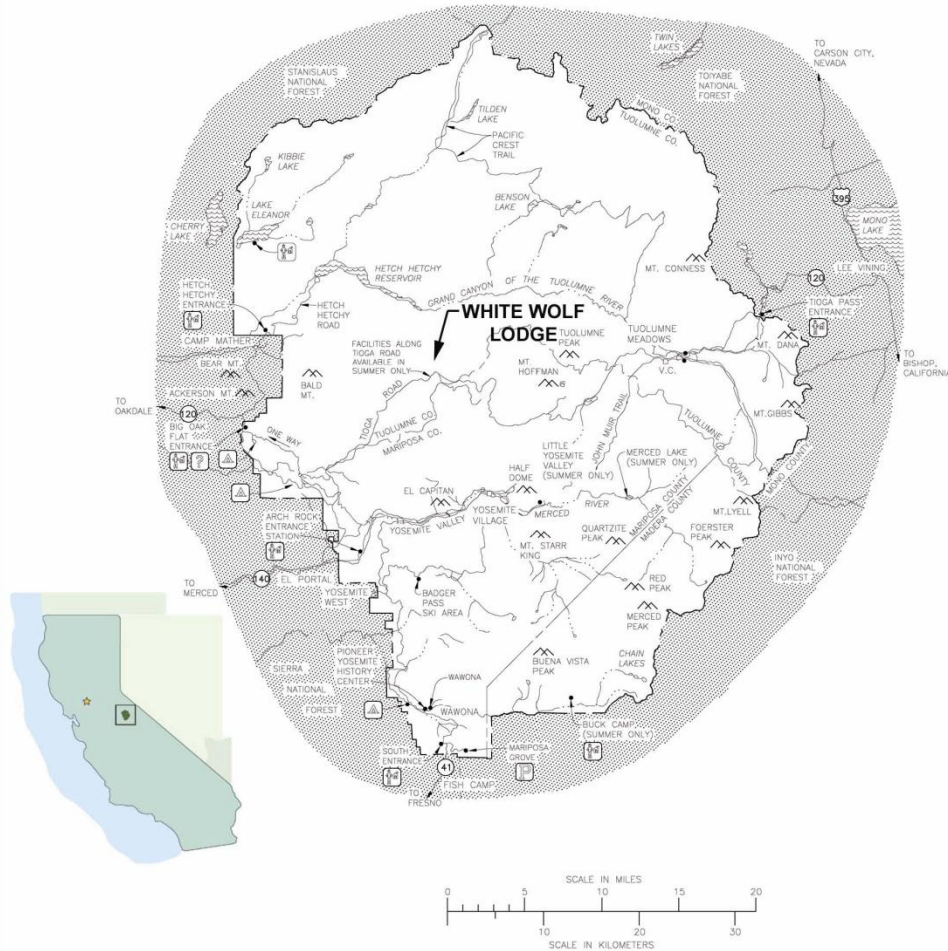


Figure 1. Yosemite National Park and White Wolf Lodge location

The National Park Service at Yosemite National Park and Delaware North Companies Parks & Resorts at Yosemite, the park's concessioner, are developing a rehabilitation plan for selected structures and features at the White Wolf Lodge facility. The rehabilitation plan focuses solely on the Main Lodge building, containing kitchen, dining, and retail functions; the two wood-framed Duplex Cabins (1/2 and 3/4; adjoining service structures; and the immediate surroundings. These buildings and site area are part of a larger facility that also includes twenty-four tent cabins, service structures, and a shared bathhouse (figure 2).

Purpose and Need

The condition of the White Wolf Main Lodge building and Duplex Cabins has been marked by heavy use and exposure to extreme temperature variations and heavy snow loads. Snowfall in the area averages more than 300 inches per year, which in the winter of 1968-1969 resulted in the collapse of the Main Lodge building and Duplex Cabin 5/6. Inadequate design for snow loads, snow melt, and site drainage are the primary causes for deterioration of all the buildings. After its collapse, cabin 5/6 was not rebuilt. The building foundations have suffered more deterioration than any other building component. The foundations are impacted by 1) insufficient transfer and support of snow loads, and 2) direct contact with moisture due to site drainage, snow accumulation, and snow melt. Wood columns, piers, and sill plates are in poor condition due to decay.

The Main Lodge building currently contains a dining room/lounge and kitchen space. The kitchen and support spaces for food service within the building are ill-equipped to handle the volume of meals produced on a daily basis during the summer months. Support spaces, such as freezers and storage, are not easily accessible from the kitchen. The site is largely inaccessible for disabled visitors and staff, and noncompliant with current Architectural Barriers Act and Americans with Disabilities Act requirements. The White Wolf facility lacks an accessible lodging unit, an accessible public restroom, and accessible paths of travel throughout the site.

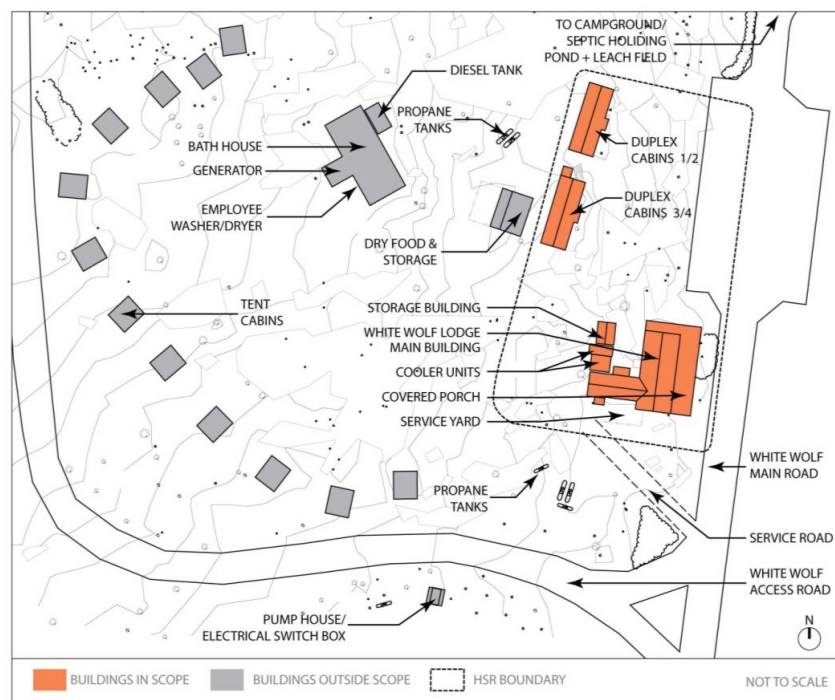


Figure 2. White Wolf Lodge site layout

The primary aspects of the proposed rehabilitation are to make necessary modifications to the Main Lodge building, Duplex Cabins, and immediate surroundings to meet the park's universal access goals; improve and repair the flooring, foundations, and roofing at the Main Lodge building and the Duplex Cabins; improve operational efficiency; provide an alternative location for two self-contained cold-storage units for kitchen operations ; and address a number of snow load and site drainage issues to minimize further weather-related damage to the structures and paths. Accessibility improvements would include an accessible cabin to accommodate guests with mobility challenges, an accessible path of travel to both the Main Lodge building and the accessible Duplex Cabin, and a new accessible restroom to accommodate both day visitors and Lodge users.

The impact assessment conducted for this *White Wolf Lodge Rehabilitation Environmental Assessment/ Assessment of Effect* would guide rehabilitation efforts. Existing conditions are evaluated and the potential impacts of the project on these and other park resources are assessed in this document. Comprehensive mitigation measures are provided to minimize any impacts on the physical, biological, cultural, and social environment.

BACKGROUND

The White Wolf Lodge Main Lodge building (figure 3) and Duplex Cabins (figure 4) are located approximately 1.5 miles north of Tioga Road and approximately 3.25 miles southeast of the east end of Hetch Hetchy Reservoir (figure 1). The site is located approximately 30 miles north of Yosemite Valley, at approximately 7,880 feet in elevation. The Main Lodge building was originally constructed as a homestead by the Meyer family sometime between 1884 and 1926. In 1926, the building was converted into a lodge, and the two Duplex Cabins were constructed. The White Wolf property was purchased by the National Park Service in 1951 (Page & Turnbull 2011a). Since that time, the Lodge has been operated by the park concessioner, and the buildings have undergone several alterations to improve operations at the facility. During the 1968-1969 winter season, the Main Lodge building collapsed and subsequently was rebuilt to reflect its 1968 appearance. The complex construction chronology and the property's exposure to extreme weather conditions influence the recommended treatment plans set forth in the *White Wolf Lodge Main Lodge Building and Duplex Cabins Historic Structure Report* (Page & Turnbull 2011a). The Main Lodge building has been determined eligible for listing in the National Register of Historic Places; the Duplex Cabins are being treated as potentially eligible by the National Park Service.

White Wolf Lodge complex, which is open only during the summer months, includes a Main Lodge building that houses the central dining room, a kitchen, a reception/store area, and a covered porch offering views of the forest; two wood-framed Duplex Cabins with private bathrooms; twenty-four tent cabins; a central bathhouse; and several storage and mechanical/ electrical/ plumbing service structures. Paths of travel between the Main Lodge building and Duplex Cabins are primarily unpaved, weaving between natural rock outcroppings and trees. The primary access drive and parking areas are asphalt-paved. There are currently no parking, access, or facility provisions to meet Architectural Barriers Act and Americans with Disabilities Act accessibility requirements.

The Great Sierra Wagon Road is a historic property near the White Wolf Lodge which was listed in the National Register of Historic Places on August 25, 1978, for its local significance in the areas of industry and transportation and its role in the region's silver mining industry and opening up the high Sierra Nevada to the public. At the time of its nomination, the road was also significant for engineering because it had relatively unaltered drywall masonry retaining walls. The listed property includes a 17.75-mile segment of road, which was built by the Great Sierra Consolidated Silver Company in 1882-1883. The segment extends from the western boundary of the park along present-day Aspen Valley Road to the approach to the White Wolf Campground which is south of the White Wolf Lodge complex (Hart 1976) and borders the Area of Potential Effect for the project.



Figure 3. White Wolf Lodge Main Lodge building, south view



Figure 4. Duplex Cabin 3/4

The White Wolf Lodge Main Lodge building and other structures are located among the site's natural features. The Main Lodge building with its central dining room and porch has a strong relationship to the roadway, which serves as a reminder of the historic purpose of the Lodge to cater to travelers passing through the area. Design considerations included the following:

- Relationship between the open entry porch at the White Wolf Main Lodge building and the roadway
- Main Lodge building, Duplex Cabins, and supporting structures sited among natural site features
- Natural setting, including surrounding meadows, evergreen forest environment, and granite rock outcroppings
- Unpaved informal pathways between buildings (figure 5)



Figure 5. Informal pathway among Main Lodge building and Duplex Cabins

Erosion due to natural precipitation and snow-melt run-off through the site, as well as snow loading against roofs and walls, have led to degradation of all building foundations. The placement of two large cold-storage units (i.e., a walk-in refrigerator and a walk-in freezer) to the west of the kitchen wing of the Main Lodge building results in heavy asymmetrical snow loads on the wall and roof of the Main Lodge building kitchen during the winter. Furthermore, the cooler units are not located near the kitchen service entrance, requiring employees to pass outside behind the Main Lodge building to access cold-food storage.

The proposed project encompasses rehabilitation of the White Wolf Lodge Main Lodge building, two Duplex Cabins, and surrounding site to address necessary upgrades to the buildings to address structural stability concerns, accessibility needs, and operational inefficiencies.

Several conceptual design alternatives were prepared in advance of a Value Analysis workshop conducted on December 9, 2010, to address the access compliance issues, including two alternatives for site accessibility improvements, and three alternatives for cabin accessibility upgrades. Alternatives for structural and drainage improvements were also developed.

RELEVANT LAWS, NATIONAL PARK SERVICE POLICY, AND YOSEMITE NATIONAL PARK PLANS

Laws

- National Park Service Organic Act (16 United States Code 1 et seq. [1988], August 25, 1916).
- National Environmental Policy Act of 1969 (42 United States Code 4341 et seq.)
- Architectural Barriers Act of 1968
- Americans with Disabilities Act of 1990
- National Historic Preservation Act (1966, as amended) (16 United States Code 470)

National Park Service Policy

- National Park Service Management Policies 2006
- Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services
- *Director's Order #58: Structural Fire Management*
- *Director's Order #12 Conservation Planning, Environmental Impact Analysis, and Decision-making*

Yosemite National Park Plans

- General Management Plan (1980)
- Vegetation Management Plan (1997)
- Fire Management Plan (2004)
- Self Evaluation and Transition Plan; Yosemite National Park Accessibility Program (2010)
- Invasive Plant Management Plan (2011)
- Yosemite National Park Design Guidelines (in preparation)
- Scenic Vista Management Plan (2010)
- Tuolumne Wild and Scenic River Comprehensive Management Plan (in preparation)

Public Involvement Process

The White Wolf Lodge rehabilitation project was presented to the public at a Yosemite National Park open house on July 27, 2011 and August 30, 2011. Internal scoping and consultation with other government agencies and American Indian governments and organizations guided the planning process. The public scoping period extended from August 15 to September 4, 2011. The public outreach called for in Section 106 of the National Historic Preservation Act was integrated with the National Environmental Policy Act process, in accordance with the 1999 *Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations, and Maintenance*.

Issues and Concerns Addressed in this Document

The National Park Service has screened concerns raised during internal and public scoping for *the White Wolf Lodge Rehabilitation Environmental Assessment / Assessment of Effect*, and has determined evaluation of impacts on the following resources to be within the scope of this rehabilitation project. These were considered in the development of a reasonable range of alternatives for rehabilitation of White Wolf Lodge and as part of the analysis of the project's potential environmental consequences.

- Geology and Soils
- Vegetation
- Special Status Species
- Hydrology/Water Quality
- Archaeological Resources

- Historic Structures/Cultural Landscapes
- Park and Concessioner Operations
- Visitor Experience

Issues and Concerns Not Addressed in this Document

Internal and external scoping identified several resource topics that do not warrant further analysis. These topics and the rationale for their dismissal are as follows:

Wetlands and Floodplains. There are no wetlands or floodplains within the boundaries of the project area.

Night Sky. None of the proposed rehabilitation activities would occur at night or result in changes to current outdoor lighting at White Wolf Lodge.

Museum Collections. The collections at Yosemite National Park would not be affected by the proposed project.

Socioeconomics. There would be no measurable impacts on regional or gateway community economies, or changes in visitor attendance or visitor spending patterns as a result of the implementation of the actions described herein.

Prime and Unique Farmlands. No unique agricultural soils are documented in this area.

Land Use. Land use would not change as a result of the implementing the project.

Transportation. The White Wolf Lodge rehabilitation is not proposing to change existing vehicle or pedestrian circulation patterns, levels of service at intersections, or established speed limits.

Energy Consumption. The White Wolf Lodge rehabilitation would not cause measurable increases or decreases in overall energy consumption.

Environmental Justice. The proposed action would not have any measurable impacts on minority or low-income communities.

Wilderness. The site is not within designated wilderness.

Wildlife. The proposed action would not have any measurable impacts on wildlife.

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CHAPTER 2: ALTERNATIVES

As described in “Chapter 1 — Purpose and Need,” the National Park Service is proposing to rehabilitate the White Wolf Main Lodge building and Duplex Cabins to address structural, operational, and visitor experience concerns. The following goals guided development of alternatives for the White Wolf rehabilitation:

- Maintain the character of the buildings and site, including significant historic features and cultural landscape characteristics
- Construct drainage features to control erosion and to protect building foundations
- Increase accessibility for park visitors and concessioner staff under the Americans with Disabilities Act
- Improve operational efficiency, particularly in the Main Lodge building kitchen.

Alternatives development was broken into five components: Site Accessibility, Cabin Accessibility, Lodge Foundation and Drainage, Cabin Foundations and Drainage, and Service and Support. Two or more design alternatives were developed for each of these components. Each initial alternative was assessed for how it best met the following criteria:

- Preserves the character of the space
- Preserves the historic cultural landscape of the site
- Meets the National Park Service stated goal (under Director’s Order #42) for providing universal access
- Preserves the natural landscape
- Maintains the historic sense of arrival for visitors approaching in vehicles along the roadway

During and following a Value Analysis Workshop on December 9, 2010, the National Park Service developed its Preferred Alternative by combining those component alternatives that scored highest during the value analysis.

ALTERNATIVE 1: NO ACTION

Under the No Action Alternative, the existing Main Lodge building and Duplex Cabins would not be improved, except for continuation of as-needed emergency repairs and routine and periodic Maintenance activities. Conditions under this alternative serve as a baseline from which impacts from other alternatives can be analyzed. Because no rehabilitation would occur, under this alternative there would be no improvement of the foundations, visitor experience, accessibility, or operational efficiency.

ALTERNATIVE 2: REHABILITATION (PREFERRED ALTERNATIVE)

The objectives of the Preferred Alternative are to (1) improve access for mobility-impaired visitors and staff; (2) incorporate new foundations into the Main Lodge building and Duplex Cabin structures to correct deterioration and settlement and control moisture infiltration and erosion from runoff; and (3) rehabilitate the structures’ roofs, floors, walls, and foundations to a condition that can be maintained through routine cyclical maintenance. The Preferred Alternative for the White Wolf Lodge Main Lodge building and Duplex Cabins includes rehabilitation of several structures and

improvements to the immediate site area. Existing structures addressed in the Preferred Alternative include the Main Lodge building, Duplex Cabin 1/2, Duplex Cabin 3/4, and the storage building. New additions beyond the current building footprints would include an extension of the sleeping room and bathroom at Duplex Cabin 1/2; construction of a new accessible, unisex public restroom building at the north end of the paved parking strip; and construction of a new food storage building to be located west of the kitchen to house existing refrigerator and freezer storage units. In addition, parking strip alterations, accessible pedestrian pathways, and drainage improvements are incorporated within the immediate area surrounding the buildings.

The primary building performance concerns relate to the foundations and floor framing (figures 6, 7, and 8). Severe decay of wood structural members and the displacement of support piers and footings have compromised the structural stability of the buildings. The recommended solution for these conditions is full replacement of the building foundations; and repair, replacement, and/or supplemental shoring of the floor in the Main Lodge building. Additional proposed upgrades include replacement of the power distribution system and electrical panels; and site grading and drainage/ foundation improvements to minimize flow of water under the buildings



Figure 6. Erosion and settling of foundations



Figure 7. Deteriorating wood-shingle siding



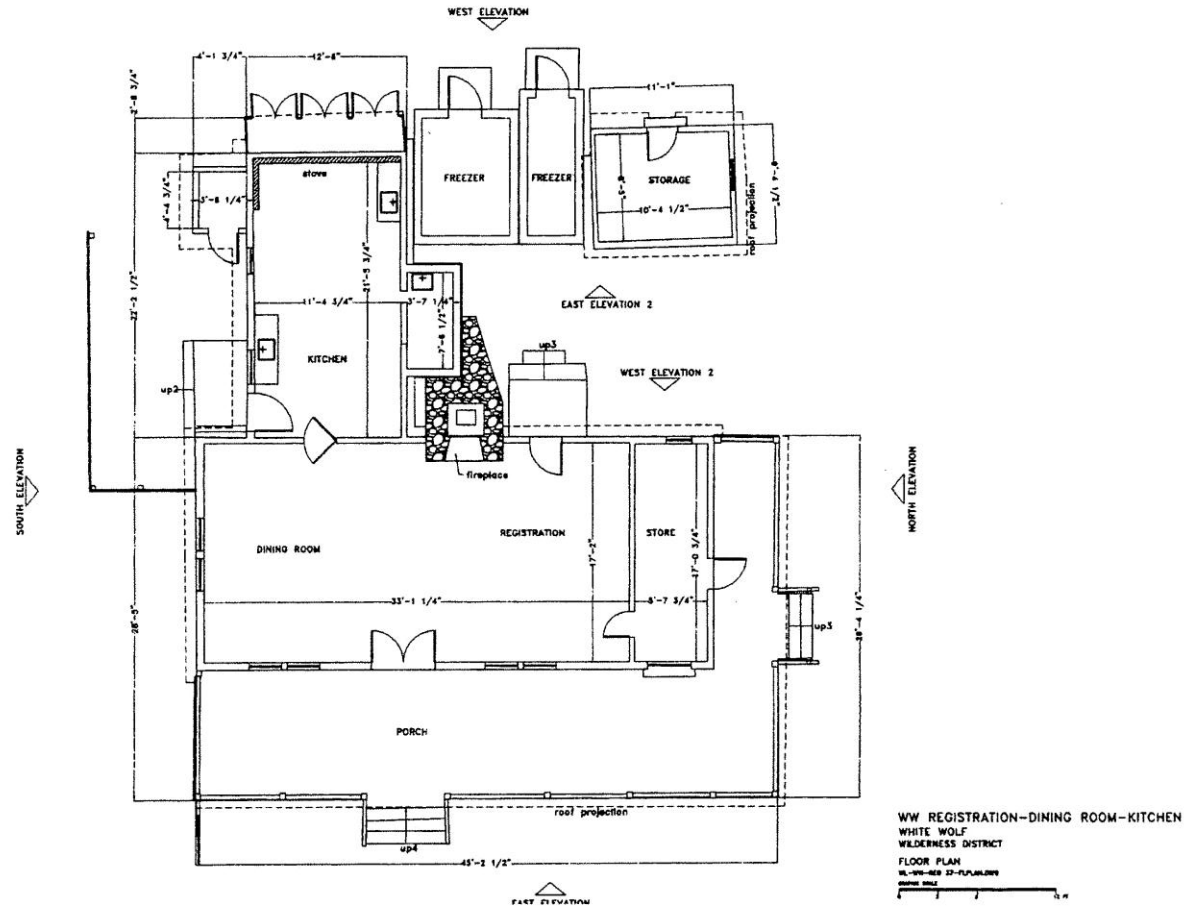
Figure 8. Decayed exterior wall

Using the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (<http://www.nps.gov/hps/tps/standguide/>) treatment definitions, rehabilitation is an appropriate treatment alternative, and is the Preferred Alternative for the White Wolf Lodge Main Lodge building and Duplex Cabins. This treatment approach is appropriate for the White Wolf resources because it provides for repair and protection of the character-defining features of the historic complex, while simultaneously allowing for necessary code, structural, and functional upgrades that would enable continued use and improved visitor experience.

The proposed treatments would consider the historic character of the Lodge. New additions and alterations would be as compatible with the historic character of the built environment as possible, and would maintain significant spatial relationships in the cultural landscape. Figures 9-12 present drawings of proposed rehabilitation or construction of the Main Lodge building, the proposed new accessible path, the Duplex Cabin 1/2 addition, and the new restroom building, respectively.

Figure 9: Existing Main Lodge Building

All Measurements through Photogrammetry and Laser Scanning - CAD plots in this booklet are with variable scale, for reference only



WW REGISTRATION-DINING ROOM-KITCHEN
 WHITE WOLF
 WILDERNESS DISTRICT
 FLOOR PLAN
 WL-WW-REG 37-FLPLAN.dwg
 DRAWN DATE: 11/11/06

DOCUMENTA SURVEYS	YOSEMITE N. P. - "AS-FOUND" ARCHITECTURAL (HISTORIC) DOCUMENTATION 2005/06 - MATHER DISTRICT
	DRAWING (FILE) NAME: WL-WW-REG 37-FLPLAN.dwg
	CONTENTS: FLOOR PLAN

Figure 10: Proposed Main Lodge building rehabilitation

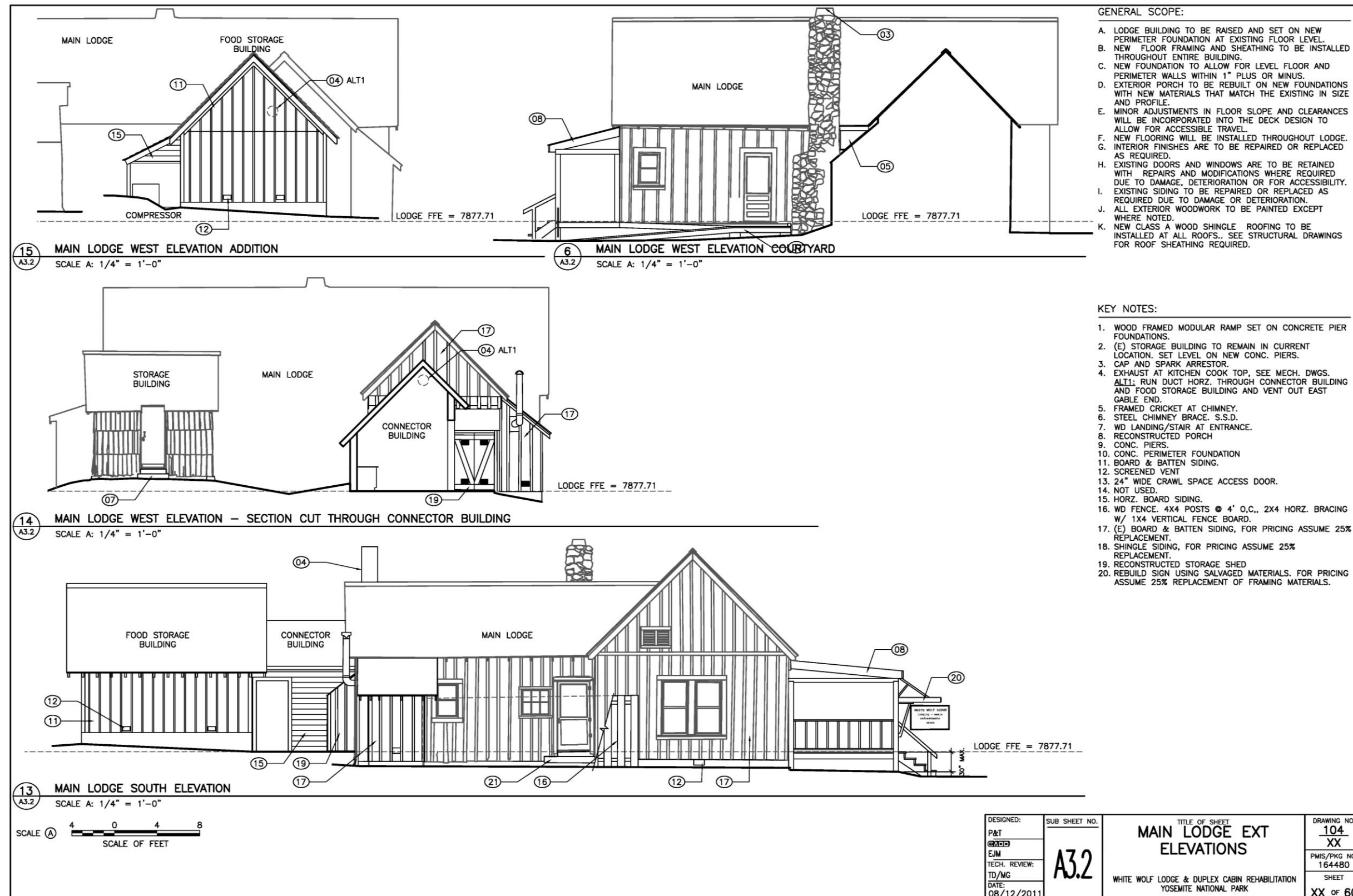


Figure 11. Proposed Americans with Disabilities Act compliant path

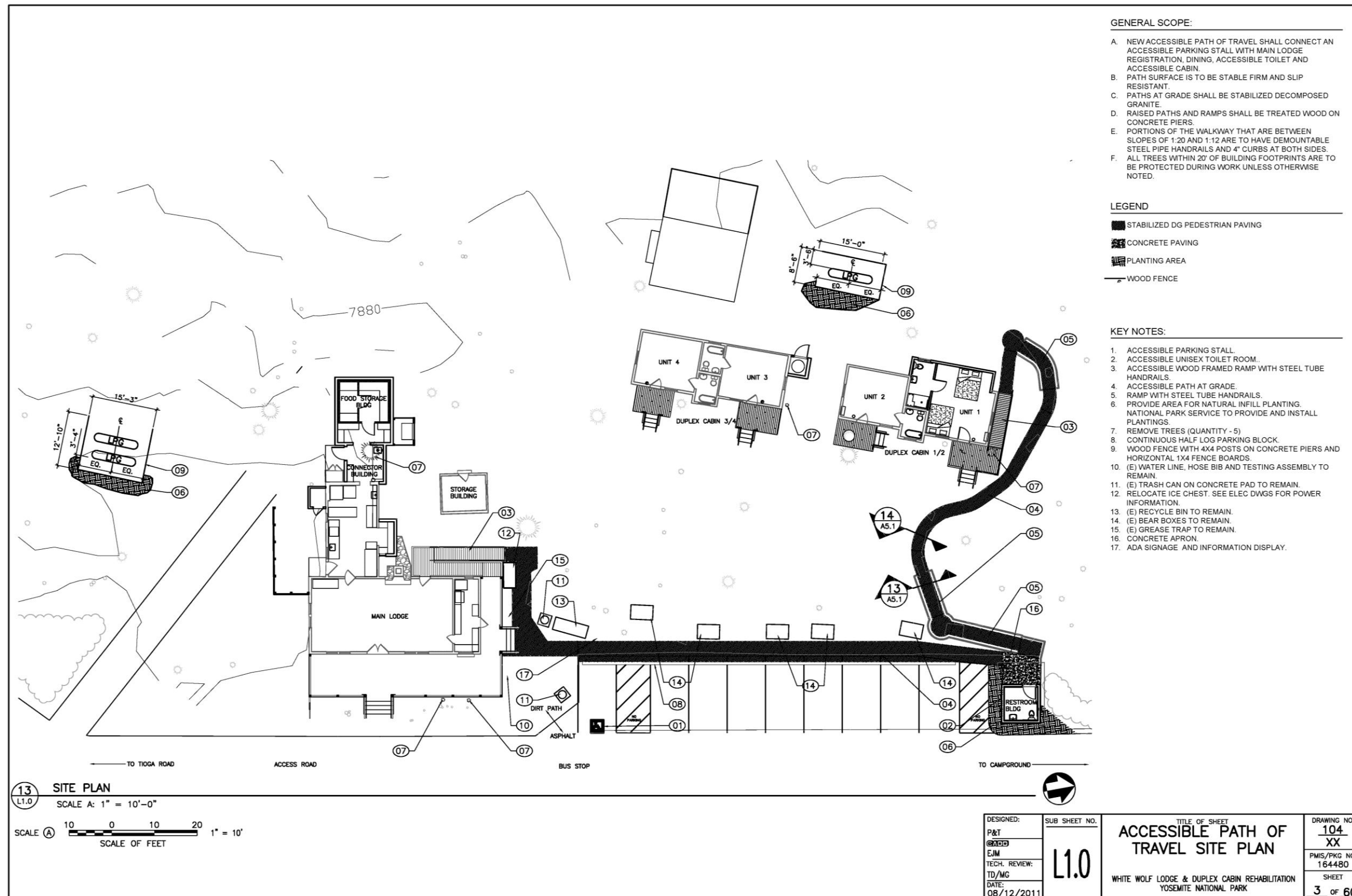


Figure 12: Proposed addition to Duplex Cabin 1/2

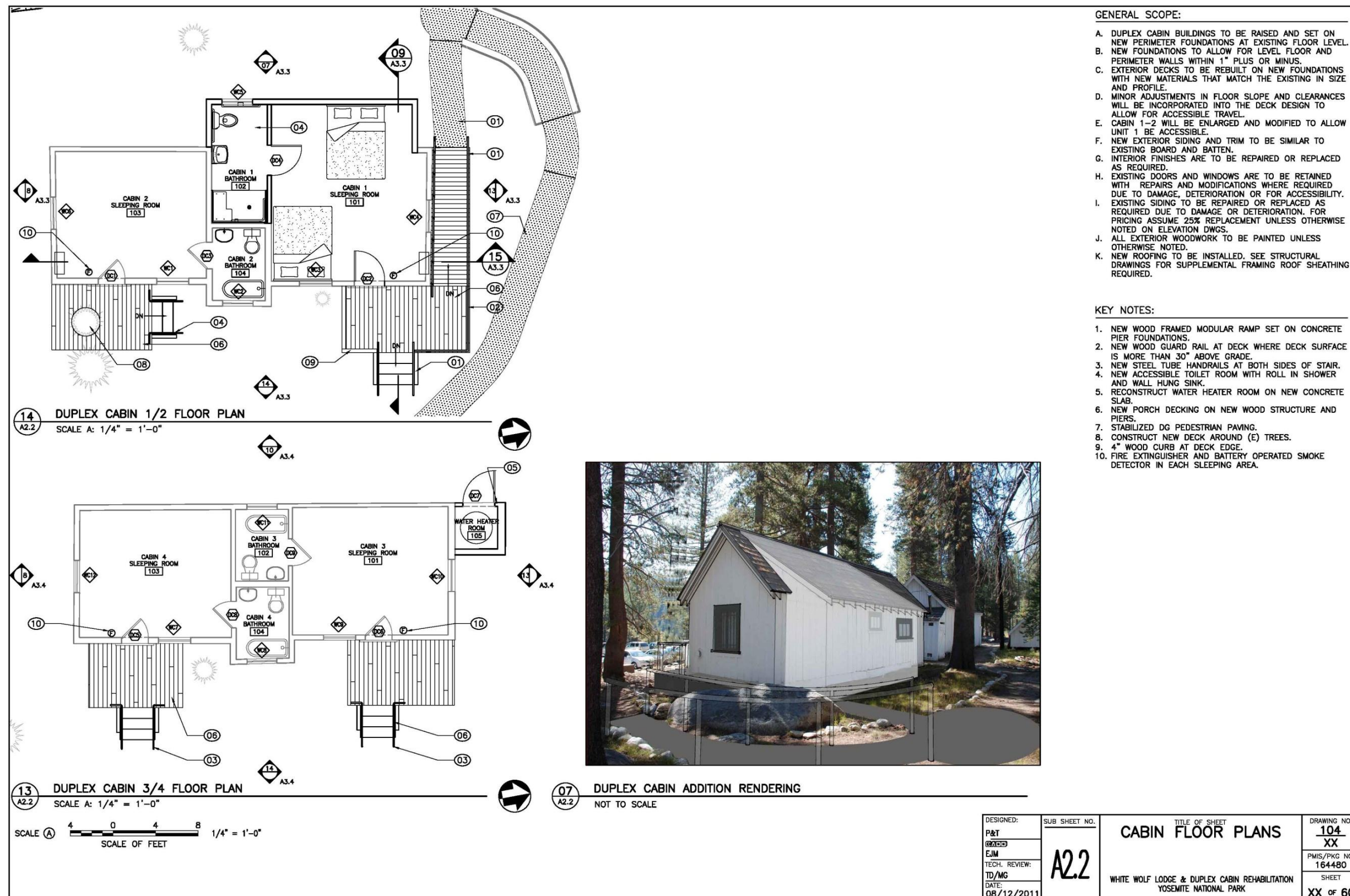
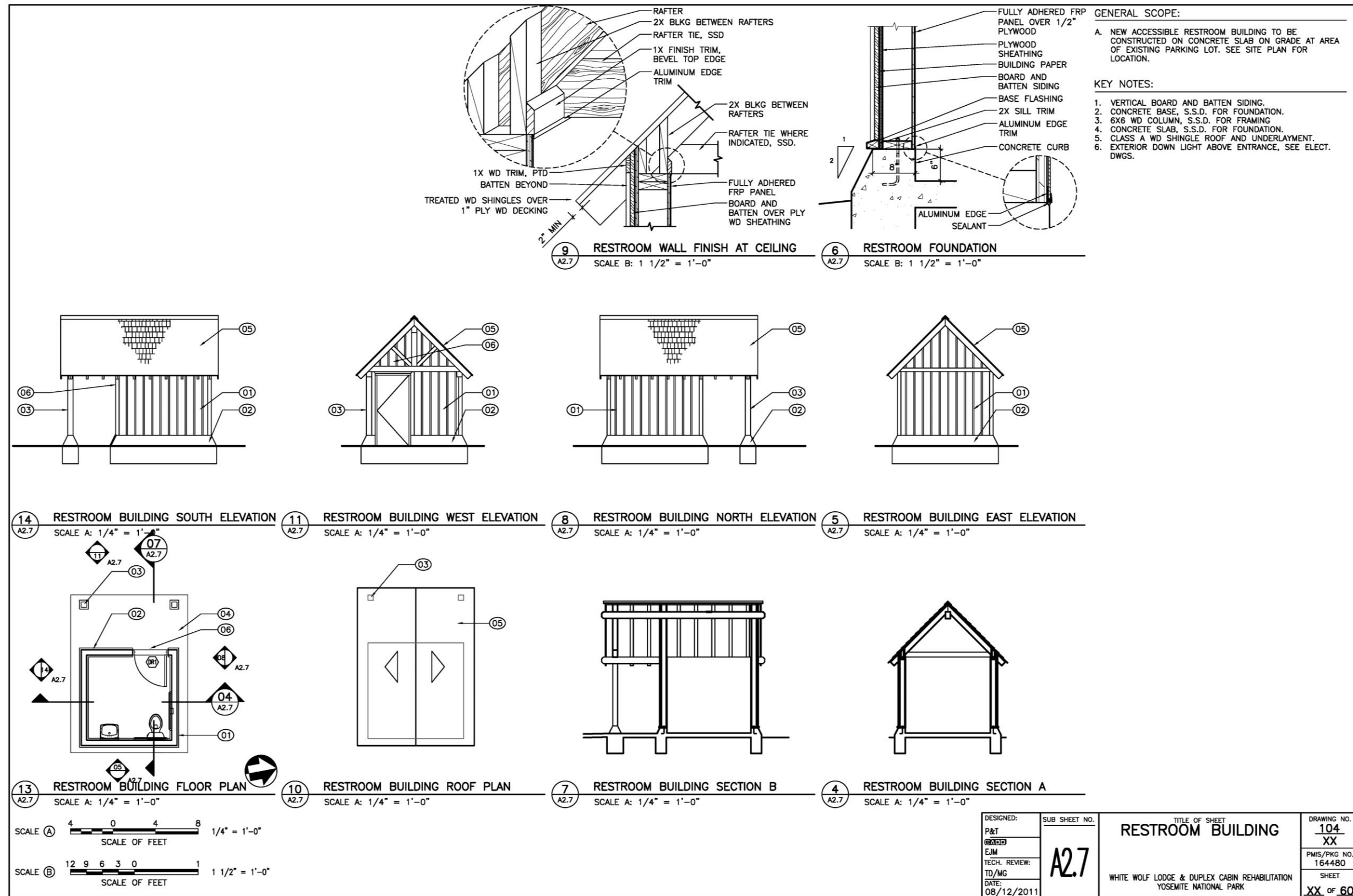


Figure 13: Proposed restroom building



The following considerations from the *White Wolf Main Lodge Building and Duplex Cabins Basis of Design Report, Yosemite National Park, California* (Page & Turnbull 2011c) would guide the approach to site and landscape rehabilitation:

Site and Drainage

- Modifications to the site were analyzed to ensure the protection of existing natural systems, sensitive ecological and cultural environments, character-defining landscape features, and site relationships
- Trees that have altered the historic resource's character-defining visual and spatial relationships were evaluated for removal, in accordance with the park's *Scenic Vista Management Plan*. Nearly all trees within the White Wolf site and surrounding the buildings would be retained to maintain the forest setting and character. Trees that physically impact structures or visitor/employee safety would be evaluated, and trimmed or removed as needed to assure protection of the historic property and the safety of building occupants, in accordance with the park's hazard tree management protocols.
- A pedestrian path of travel west of the parking strip that is separated from vehicular traffic is proposed (see figure 10).
- Per *A Sense of Place – Design Guidelines for Yosemite Valley* and the 1980 *General Management Plan*, explore an interpretive opportunity regarding the alignment of the Old Tioga Road and its relationship to the development of White Wolf.
- During replacement of building foundations, perimeter drainage systems or foundation waterproofing would be integrated to direct surface runoff around the structures and improve overall site drainage.
- Areas adjacent to the structures would be regraded to provide positive drainage away from the buildings to a minimum distance of 5 feet.

Architectural Features

- Where repairs, patching and replacement of features and additions to the facility are proposed, they would be designed to be compatible with the existing architectural style, materials, and construction of the buildings.
- Where additions are proposed, the new construction will be differentiated from the existing, while respecting the architectural qualities of the character-defining features, and placed away from primary facades.
- Design additions utilizing appropriate size, proportions, and massing to be subordinate to the existing character-defining buildings.
- Alterations to implement infrastructure, life-safety, or programmatic improvements to the buildings would be designed and analyzed to serve the continued use of the facility, meet the National Park Service policies and goals, and comply as is possible with the Secretary of the Interior's standards for rehabilitation (*Preservation Brief #14, New Exterior Additions to Historic Buildings: Preservation Concerns*).
- Replace wood-shingle siding at the storage building in-kind. Paint siding white to match surrounding structures.
- Replace board-and-batten siding on Duplex Cabins where decay and buckling occurs.

- Provide new roofs with a greater level of fire protection.
- Remove wood shingles and inspect sheathing and existing attachment/nailing for deterioration.
- Install new wood shingles to match existing type, dimensions and reveals.
- Refurbishment of all wood windows to restore operation and improve natural ventilation capabilities within all spaces.
- Screening of the cold storage units from public view.
- Improve protection from animal intrusion; securing the storage units from bears is a measure that is important to protect visitors and food storage.

Structural Systems

- Design of replacement foundations would consider releveling the floor of the Main Lodge building dining room and providing adequate slope for drainage in the kitchen.
- Design of all new foundations would consider impacts on site drainage and grading and resolve the issue by directing water away from the structure.
- Provide strengthening for decayed floor framing through replacement or supplementing the existing members for the floors and decks of the Main Lodge building and Duplex Cabins.
- Perform a structural analysis of the roof framing for the Main Lodge building and Duplex Cabins to assess the current structural load-carrying capacity relative to the anticipated snow loads.
- Provide bracing or alternate means to stabilize the upper section of the chimney on the Main Lodge building using corrosion-resistant materials and minimizing the visibility of the bracing from primary public viewpoints.
- For visual compatibility with historic character, retool joints to more closely resemble recessed joint profile of fireplace masonry depicted in historic photographs. Conduct fireplace treatments, such as removing wood mantelpiece and retouching stone, to restore character consistent with historic photographs.

Mechanical, Electrical, and Plumbing Systems

- Replace wall-mounted gas heaters in the Duplex Cabins with new units.
- Replace or reinstall water heater flues to comply with code-mandated distances from building partitions and other combustible surfaces.
- Replace the water heater serving the Duplex Cabins.
- Replace plumbing fixtures that are beyond their useful life and update plumbing systems such as floor drains/hand sinks as needed for kitchen operations.
- Replace the non-code-compliant electrical distribution system with code-compliant components, including new feeder lines from the generator to the Main Lodge panel via an overhead conduit system or bus way, and new distribution panels.
- Provide code-compliant electrical services and repairs.

Code Upgrades

- Provide an accessible sleeping cabin (see figure 11).
- Provide an accessible path of travel from parking and bus drop-off areas through the site and to the Main Lodge building, and remove barriers to accessibility within the buildings (figure 10).
- Parking to be restriped (including one Americans with Disabilities Act van accessible space) and ground and overlain to achieve Americans with Disabilities Act compliant slopes (Page & Turnbull 2011d)
- Incorporate compliant ramps at secondary facades of the Main Lodge building and cabin 1/2 to protect primary character-defining features of the property.
- Modify door thresholds to provide level transitions from exterior landing to interior landing.
- Maintain existing floor finish levels where possible at transitions from the ramps to existing porches and to building floor levels.
- Modify the riser and tread dimensions at the Duplex Cabin stairs for dimensional uniformity
- An exemption request, as allowed by National Park Service *Structural Fire Management Reference Manual 58*, has been prepared for submission to the National Park Service for the omission of a fire detection and alarm system in the Main Lodge building and the Duplex Cabins. The installation of a fire detection and alarm system is impractical in the remote location, particularly due to the discontinuous primary power supply. The exemption request also incorporates the omission of automatic sprinkler systems in the Main Lodge building and Duplex Cabins. The limited building sizes, direct egress to the exterior, and presence of battery-operated smoke alarms in the Duplex Cabins afford a reasonable level of safety consistent with the requirements of the Life Safety Code (National Fire Protection Association 101).
- Modify exit door hardware at both doors at the Main Lodge building entrance to achieve single action operation.
- Provide a Class K portable fire extinguisher within the Main Lodge building kitchen.
- Ensure existing smoke alarms are maintained in a fully operational condition in all four cabin sleeping units.
- Review and update as necessary the manual firefighting procedures for White Wolf in light of the remoteness of the area.

Sustainability

- Use LED and/or low-voltage lighting compatible with the historic character of the buildings.
- Continue use of natural ventilation through operable windows and screen doors to reduce energy consumption.
- Consider use of insulating/reflective window treatments, such as curtain or operable blinds, to reduce heat exchange between the building interior environment and the exterior.
- Reuse existing structural and architectural materials to the degree possible. Reduced energy use and water consumption is targeted where new systems and equipment are installed. Where new materials are needed, the design would incorporate responsibly manufactured

materials with recycled content and containing low volatile organic carbon levels that minimize the waste stream and improve indoor air quality.

Public Accessibility and Life Safety

In order to provide Architectural Barriers Act and Americans with Disabilities Act compliant access, a new pathway and ramp system would be provided from the parking area to the Main Lodge building, to Duplex Cabin 1/2, and to the new restroom building (figure 10). The Main Lodge building and Duplex Cabin 1/2 interiors would be modified to ensure an accessible path of travel and accessible facilities within the buildings.

Required upgrades would be provided according to the Fire Safety Plan prepared for the Main Lodge building and Duplex Cabins, in accordance with National Fire Protection Act 101, Life Safety Code. These modifications include door hardware and threshold modifications, battery-operated smoke alarms in all four cabin units, and a Class K portable fire extinguisher in the kitchen. An exemption request has been submitted to the Yosemite National Park Fire Marshal for the omission of automatic sprinkler systems and fire alarm systems in the Main Lodge building and Duplex Cabins.

Visitor Services and Programmatic Requirements

Visitor services offered at the White Wolf Lodge complex would be maintained in the Preferred Alternative at their current level. Dining, kitchen, and retail areas would continue to operate within rehabilitated spaces. Many interior floor and ceiling finishes would be replaced with new materials in keeping with the historic character. Improvements would be implemented in the kitchen area to accommodate a new floor drain, a new sink, and new non-slip floor finish. A new accessible, unisex public restroom would be provided on site for all Lodge visitors (figure 12).

ALTERNATIVES CONSIDERED BUT DISMISSED

Several component design alternatives were prepared to address the accessibility compliance issues during the planning process for this project: two alternatives for site accessibility, and three alternatives for cabin accessibility. Alternatives for two additional components of the rehabilitation plan (Main Lodge building foundation and drainage, and cabin foundation and drainage) were discussed during the initial information phase of the Value Analysis workshop held on December 9, 2010, but it was determined that the alternatives evaluation should be based on technical and cost considerations, as these options did not materially affect the broader evaluation criteria selected for the choosing-by-advantages portion of the value analysis. Those design components that were not incorporated into the Preferred Alternative did not meet the purpose and need, were not technically feasible, would result in more environmental impacts, and/or were not economically feasible.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

In accordance with *Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* and CEQ requirements, the National Park Service is required to identify the "environmentally preferred alternative" in all NEPA environmental compliance documents, including environmental assessments. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act, and the Council on Environmental Quality's implementing regulations. The Council on Environmental Quality (46 *Federal Register* 18026 – 18038) provides direction that the "environmentally preferable alternative is the alternative that would promote the national environmental policy as expressed in NEPA's Section 101."

Generally, the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (46 *Federal Register* 18026 – 18038). Alternative 2 would improve the structural stability of the Main Lodge building and the Duplex Cabins. Upon implementation of Alternative 2, visitors would find the Lodge via a smooth-surfaced accessible path. Alternative 1 would result in ongoing deterioration of the Main Lodge building and Duplex Cabins, including their foundations and exterior sheathing.

The alternative that best meets the environmentally preferred criteria is Alternative 2, the Preferred Alternative. Analysis of resource and other impacts and mitigation strategies in Chapter 3 indicate that the Preferred Alternative achieves the best balance between the need for improving the structural stability of the buildings, visitor experience, and park and concessioner operations, and preserving the site's historic character and significance. Table 2-1 presents a summary of impacts by alternative.

Table 2-1. Summary of Impacts by Alternative

Impact Topic	Alternative 1: No-action Alternative	Alternative 2: Preferred Alternative
Geology and Soils	Ongoing impacts from soil compaction from visitor use and erosion due to poor site drainage would continue. Overall, there would be site-specific long-term minor adverse impacts on soils. The failure to rehabilitate the Main Lodge building and Duplex Cabins would make them more susceptible to seismic events, resulting in a site-specific, long-term, moderate adverse impact on geologic hazards.	Proposed foundation work for the Main Lodge building and Duplex Cabins would affect shallow subsurface geology and local soils. Activities under Alternative 2 would result in reduced potential erosion around buildings and improved structural resistance to seismic shaking, resulting in a site-specific long-term minor beneficial impact on geologic hazards. Overall there would be site-specific, short-term, minor adverse impacts on geology and soils during rehabilitation activities and site-specific, long-term, minor adverse impacts on geology and soils following rehabilitation due to installation of the aprons.
Vegetation	The existing site areas around the Main Lodge building and Duplex Cabins would not be improved, except for continuation of emergency erosion repairs and routine and periodic maintenance activities. Foot traffic on the site results in some trampling of vegetation and, over time, denudation of vegetation. As a result, impacts from Alternative 1 are expected to have long-term, local minor adverse impacts on vegetation.	Vegetation impacts from Alternative 2 would include selective vegetation removal for construction of the path or new buildings, resulting in the loss of a few trees, shrubs, forbs, grasses and other plants. As a result, impacts from Alternative 2 are expected to have long-term, local minor adverse impacts on vegetation at the White Wolf Lodge complex. Minor short-term and indirect adverse impacts from construction may occur due to plant trampling and soil disturbance from building repairs. However, implementation of construction best management practices would be employed to minimize impacts associated with trampling and erosion.
Special Status Species	The project is adjacent to suitable Sierra Nevada yellow-legged frog habitat; however the impact on the species under Alternative 1 is likely to be entirely beneficial, discountable, or insignificant. The action may pose impacts but given circumstances or mitigation conditions, the impacts may be discounted, insignificant, or completely beneficial. Under Alternative 1 and per Section 7 of the Endangered Species Act the determination would be “May Affect, Not Likely to Adversely Affect.”	The project is adjacent to suitable Sierra Nevada yellow-legged frog habitat; however the impact on the species under Alternative 1 is likely to be entirely beneficial, discountable, or insignificant. The actions under Alternative 2 that may pose adverse impacts, namely the pumping of water around the foundations of the buildings during rehabilitation work, would be mitigated and any impacts may be discounted or deemed insignificant. Under Alternative 1 and per Section 7 of the Endangered Species Act the determination would be “May Affect, Not Likely to Adversely Affect.”
Hydrology and Water Quality	There would be no impacts on hydrology and water quality under Alternative 1.	Impacts on hydrology and water quality under Alternative 2 would be site-specific, short-term, minor, and adverse during rehabilitation and site-specific, long-term, minor, and adverse following rehabilitation as a result of the disruption of natural sheet flow and infiltration from the installed apron and expanded hardscape.

Impact Topic	Alternative 1: No-action Alternative	Alternative 2: Preferred Alternative
Archeological Resources	Under the No Action Alternative, there would be no adverse effect on potentially eligible archeological resources. There would be a “no historic properties affected” determination under this alternative.	If the Preferred Alternative (Alternative 2) is implemented, no archeological sites would be adversely impacted. There would be a “no historic properties affected” determination under this alternative.
Historic Structures and Cultural Landscapes	Under Alternative 1, regular maintenance and upkeep of the buildings would continue to occur. As the No Action Alternative would not alter, directly or indirectly, any of the characteristics of the buildings that qualify them for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association, Alternative 1 would have “no adverse effect.”	Under Alternative 2, the addition to the Duplex Cabin would be considered an “adverse effect.” During the course of rehabilitation and system upgrade work, and particularly during tasks related to rehabilitating the exterior and interior of the buildings, there is a potential that original features and materials obscured by previous alterations might be uncovered and exposed. This effect would be mitigated by photography and documentation per the 1999 Programmatic Agreement.
Visitor Experience	In the long term, by not implementing electrical and other safety improvements proposed under Alternative 2, continued deterioration would likely lead to more frequent or extended emergency repairs resulting in a site-specific long-term moderate adverse impact on visitor experience. In addition, continued deterioration of the Main Lodge building could result in increased frequency of service interruptions or temporary closures of cabin units, restrooms, and dining room for repairs.	The Main Lodge building and Duplex Cabins would be closed during rehabilitation construction during the summer of 2013, depending on funding, resulting in a site-specific, short-term moderate adverse impact on visitor experience. Several long-term beneficial impacts on visitor experience would occur with implementation of Alternative 2. The rehabilitation of the Lodge complex would beneficially affect visitor experience by providing more efficient services, improved accessibility, and a new restroom. Therefore, implementation of Alternative 2 would be expected to result in site-specific, long-term moderate beneficial impacts on visitor experience and recreation.
Park and Concessioner Operations	Overall, under Alternative 1, a site-specific, long-term minor to moderate adverse impact on concessioner operations would occur, with annually increasing costs to maintain the Main Lodge building and Duplex Cabins.	The improvements to White Wolf Lodge under Alternative 2 would result in long-term improvements that would reduce the annual maintenance and emergency repair costs at the Main Lodge building and Duplex Cabins over the long term, when compared to existing conditions, resulting in a minor to moderate beneficial impact on concessioner operations. Safety improvements to the Main Lodge building would result in site-specific, long-term moderate beneficial impacts on both park and concessioner operations by reducing the potential for visitor and staff accidents and loss of use of the facilities due to closures for repairs.

MITIGATION MEASURES

The National Park Service places a strong emphasis on avoidance, minimization, and mitigation of impacts. To help ensure that field activities associated with the White Wolf Lodge Rehabilitation protect natural, cultural, and social resources and the quality of the visitor experience, mitigation measures have been developed. Table 2-2 presents some specific mitigation measures that would be implemented prior to, during, and after construction of the proposed improvements.

Table 2-2. Mitigation Measures

Mitigation Measure	Responsibility	Critical Milestones
GEOLOGY AND SOILS		
Use approved siltation and sediment control devices in construction areas to reduce erosion and surface scouring.	Contractor	Concurrent with project activities
Use approved siltation and sediment control devices appropriate to the situation in grading areas to capture eroding soil before discharge to riparian channels.	Contractor	Concurrent with project activities
Conserve and salvage topsoil for reuse. Materials will be reused to the maximum extent possible.	Contractor	Concurrent with project activities
HYDROLOGY AND WATER QUALITY		
Where working areas are adjacent to or encroach on live streams, barriers shall be constructed that are adequate to prevent the discharge of turbid water in excess of specified limits.	Contractor	Prior to and concurrent with project activities
All disturbed soil and fill slopes shall be stabilized in an appropriate manner.	Contractor	Prior to and concurrent with project activities
Store equipment and materials away from all waterways.	Yosemite National Park, Project Manager; Contractor	Concurrent with project activities
Wastewater contaminated with silt, grout, or other by-products from construction activities shall be contained in a holding or settling tank to prevent contaminated material from entering watercourses.	Contractor	Concurrent with project activities
Remove hazardous waste materials generated during implementation of the project from the project site immediately.	Contractor	Concurrent with project activities
Dispose of volatile wastes and oils in approved containers for removal from the project site to avoid contamination of soils, drainages, and watercourses. Keep absorbent pads, booms, and other materials onsite during projects that use heavy equipment to contain oil, hydraulic fluid, solvents, and hazardous materials spills.	Contractor	Concurrent with project activities
Use silt fencing at drainages to prevent construction materials from escaping work areas.	Contractor	Concurrent with project activities

Mitigation Measure	Responsibility	Critical Milestones
Material from construction work shall not be deposited where it could be eroded and carried to the stream by surface runoff or high stream flows.	Contractor	Concurrent with project activities
VEGETATION		
Ensure that all earth moving equipment and hand tools enter the park free of mud or seed-bearing material to prevent the introduction of non-native plants. The NPS will inspect all equipment prior to use on the project. Map and treat noxious weeds prior to construction. Certify all seeds and straw material as weed-free. Ensure that imported top-soil is weed-free. The NPS will approve sources of imported fill material that will be used within the top 12 inches of the finished grade. Monitor and treat invasive plants for three years post-construction.	Yosemite National Park, Project Manager; Contractor	Prior to, concurrent with and following project activities
Install temporary fencing (black silt fencing or orange construction fencing) around the entire project area to protect natural surroundings (including trees, and root zones) from damage. Avoid fastening ropes, cables, or fences to trees.	Yosemite National Park, Project Manager; Contractor	Prior to and concurrent with project activities
Use native seed mix or seed-free mulch to minimize surface erosion and the introduction of noxious weeds.	Contractor	Concurrent with project activities
While not expected with this project, the Park Botanist shall be notified if any special status plant species are identified in the project area. If special-status plant species are identified within the project area, the Park Botanist will work with the project manager to avoid impacts.	Yosemite National Park, Project Manager; Contractor	Prior to and concurrent with project activities
SPECIAL STATUS SPECIES		
Provide information to the contractor regarding wildlife concerns at the project briefings, and provide contractor specifications and Best Management Practices to avoid activities that are destructive to wildlife and habitats. Project Manager will consult with the park biologist to schedule construction activities with seasonal consideration of wildlife lifecycles to minimize impacts during sensitive periods (i.e., after bird nesting seasons, when bats are neither hibernating nor have young, etc.)	Yosemite National Park, Project Manager, Contractor	Concurrent with and following project activities
Limit the effects of light and noise on adjacent habitat through controls on construction equipment. No outdoor construction activities are to occur between dusk and dawn (7am) to eliminate the need for outdoor construction lighting, and to avoid disruption of mating, nesting, or foraging owls.	Yosemite National Park, Project Manager; Contractor	Prior to and concurrent with project activities
Prior to project activities, particularly any tree trimming activities, a qualified wildlife biologist will screen the area for bat roosts, nesting birds, and other features that are important to wildlife habitat. If found, the biologist will provide mitigation or direction for avoidance (e.g., flagging or avoiding the area, advise as to whether the activity must be delayed to ensure that sensitive species such as nesting migratory birds are protected and not disrupted.)	Yosemite National Park, Project Manager working with the park wildlife biologist	Prior to project construction activities

Mitigation Measure	Responsibility	Critical Milestones
<p>If suitable Sierra Nevada yellow-legged frog habitat exists within, or adjacent to, the project area, a National Park Service biologist will determine if frogs are present either by checking existing data sources, or by conducting surveys between June 1 and September 15. Surveys will be conducted during the frog's active season which varies by elevation, habitat, and snow pack. If frogs are detected, the biologist will inform the Project Manager how best to avoid harm during construction activities, and may recommend delaying/rescheduling work in that particular area or minimizing the diversion of water from streams.</p> <p>In the event that the frog is present, a National Park Service approved biologist will monitor ground disturbance and construction activities within and adjacent to frog habitat.</p>	Yosemite National Park, Project Manager working with the park wildlife biologist	Prior to project construction activities
HISTORIC PROPERTIES		
<p>The Park will adhere to the <i>Park Programmatic Agreement Among the National Park Service at Yosemite, the California State Historical Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations, and Maintenance, Yosemite National Park, California</i> (1999 PA) or other agreement as determined necessary through consultation (e.g., Memorandum of Agreement) to resolve adverse effects. Standard mitigation measures, as defined in the draft Memorandum of Agreement attached as Appendix A, include documentation, salvage, interpretation, site clean-up, and national register reevaluation.</p>	Yosemite National Park, Project Manager	Prior to and concurrent with project activities
<p>The Main Lodge building, Duplex Cabin 1/2, and the landscape setting will be documented by black and white 5x7 photographic prints, and a historic record that includes narrative history and original drawings. To ensure compatibility, there will be a use of similar materials while still distinguishing them from the original structure.</p>	Yosemite National Park, Project Manager	Prior to project activities
<p>For the Duplex Cabin 1/2, the addition will be placed on the secondary façade to minimize visual impacts.</p>	Yosemite National Park, Project Manager	Prior to and concurrent with project activities
<p>For the Main Lodge building, minimize the visual impact of the new structure by making it secondary to the Main Lodge.</p>	Yosemite National Park, Project Manager	Prior to and concurrent with project activities
<p>For the new restroom, build the structure with compatible materials and size constraints and away from existing historic structures but within the existing parking area.</p>	Yosemite National Park, Project Manager	Prior to and concurrent with project activities
<p>For compatibility with the site landscape, pathway materials will be comprised of stabilized, decomposed, curbing will be made with natural materials (granite), the amount of retaining walls will be minimized, and metal pipe railing will be painted a dark color.</p>	Yosemite National Park, Project Manager	Prior to and concurrent with project activities
<p>All treatments within historic landscapes will be in keeping with the <i>Secretary of The Interior's Standards for the Treatment of Historic Properties</i>.</p>	Yosemite National Park, Project Manager	Prior to project activities

Mitigation Measure	Responsibility	Critical Milestones
Archeological sites will be fenced off with orange hazard fencing by a professional archeologist. All project personnel would be briefed to stay out of areas with sensitive archeological resources.	Yosemite National Park, Project Manager, Contractor	Prior to project activities
The possibility of inadvertent discovery of archeological resources would be addressed through monitoring and discovery stipulations as defined in the draft Memorandum of Agreement with the California State Historic Preservation Officer (Appendix A)	Yosemite National Park, Project Manager, Contractor	Prior to and concurrent with project activities

CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Specific impact topics were identified for evaluation of potential natural, cultural, and sociocultural impacts that might result from implementation of the alternatives, as identified by the public, the National Park Service, and other agencies. Compliance with federal and applicable state laws and regulations, federal executive orders, and National Park Service policy also was evaluated.

Information in this section is derived from a comprehensive review and analysis of existing information pertaining to White Wolf Lodge and the surrounding area. It includes information from the Yosemite National Park *General Management Plan* (NPS 1980); various park natural and cultural resources management plans and documents that tier off of the *General Management Plan*, other park planning efforts, and subject matter expertise within the National Park Service. Immediately following the description of each park resource potentially affected by the proposed project is a description of the potential impacts that could result from implementation of the alternatives.

IMPACT ANALYSIS METHODOLOGY

The National Environmental Policy Act requires that environmental documents disclose the environmental impacts of a proposed federal action, reasonable alternatives to that action, and any adverse environmental impacts that cannot be avoided should the proposed action be implemented. This section analyzes the environmental impacts of project alternatives on affected park resources. These analyses provide the basis for comparing the impacts of the alternatives. The National Environmental Policy Act requires consideration of context, intensity, and duration of impacts; direct and indirect impacts; cumulative impacts; and measures to avoid or mitigate impacts.

The environmental consequences for each resource category were defined based on the following information regarding context, duration, intensity, and type of impact or effect. Unless otherwise stated, the analysis is based on a qualitative assessment of impacts. Following a description of the affected environment, the potential environmental consequences, or impacts, that would occur as a result of implementing each alternative are analyzed and presented for each resource topic.

Context describes the area in which the impact would occur. Are the impacts site-specific, local, regional, or even broader?

Duration describes the length of time an impact would last, either short-term or long-term.

- Short-term impacts generally last only as long as the construction or rehabilitation period, and affected resources generally resume their previous conditions following these activities.
- Long-term impacts last well beyond the construction or rehabilitation period, and the resources may not resume their previous conditions. Impacts could be considered permanent, lasting many years.

Intensity describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Because definitions of intensity vary by resource topic, intensity definitions are provided separately for each resource topic.

Type describes the classification of the impact as either beneficial or adverse:

- **Beneficial:** A positive change in the condition or appearance of the resource, or a change that moves the resource toward a desired condition. Because the definition of beneficial varies by resource topic, a discussion is provided separately for each resource topic.
- **Adverse:** A change that moves the resource away from a desired condition or detracts from its appearance or condition. Because the definition of adverse varies by resource topic, a discussion is provided separately for each resource topic.

Effects on Special Status Species

Special status species impact determinations are formally determined under the Endangered Species Act (Section 7). This slightly different impact methodology is described in the special status species impact assessment methodology section under Environmental Consequences.

Effects on Historic Properties

Effects on historic properties are formally determined in accordance with Section 106 of the National Historic Preservation Act. Although cultural resources impacts are also initially characterized as noted above to fulfill National Environmental Policy Act requirements, effects on historic properties, defined as those cultural resources listed in or eligible for listing in the National Register of Historic Places, are assessed as described below to make a formal determination of “no effect,” “no adverse effect,” or “adverse effect,” under Section 106 of the National Historic Preservation Act (36 CFR 800). In accordance with *Management Policies 2006* and the 1999 *Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations, and Maintenance, Yosemite National Park, California*, this analysis fulfills the responsibilities of the National Park Service under Section 106 of the National Historic Preservation Act. Cumulative effects as well as project-specific effects are considered in the effects determination under Section 106.

CUMULATIVE IMPACT SCENARIO

The Council on Environmental Quality describes a cumulative impact as follows (40 CFR 1508.7):

A ‘cumulative impact’ is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The cumulative projects addressed in this analysis include past and present actions affecting the White Wolf Lodge complex and vicinity, as well as any management or development activity currently being implemented or planned for implementation in the reasonably foreseeable future. Cumulative actions are evaluated in conjunction with the impacts of an alternative to determine if they have any additive impacts on a particular resource. The following are considered cumulative impact projects.

Reasonably Foreseeable Actions or Plans

Yosemite National Park

- Out-of-Valley Campground Plan (Parkwide Campground Study)

- Wilderness Stewardship Plan

Current Actions or Plans

Yosemite National Park

- *General Management Plan* (current guidance of park management)
- Tuolumne Wild and Scenic River Comprehensive Management Plan
- Tenaya Lake Area Plan
- Tioga Trailheads Project
- Merced Wild and Scenic River Comprehensive Management Plan
- Tioga Road Rehabilitation

Past Actions or Plans

Yosemite National Park

- Replacement of collapsed White Wolf Lodge Main Lodge building and removal of collapsed Duplex Cabin 4/5 in 1969
- The Ahwahnee Rehabilitation
- Curry Village Rockfall Hazard Zone Structures Project

GEOLOGY AND SOILS

Affected Environment

The area around White Wolf Lodge is underlain almost entirely by granitic bedrock of the various plutons that comprise much of the Sierra Nevada batholith. Exposed slabs of granitic bedrock are common in the project area (culminating in the glacially sculpted domes and slopes east of the site near Tenaya Lake and Tuolumne Meadows).

Ground shaking from earthquakes generated by seismically active fault zones poses a hazard for the Lodge and its infrastructure. Although Yosemite National Park is located in a low seismic hazard zone relative to many other areas of California, large earthquakes are possible along the range-front fault system bounding the eastern Sierra Nevada adjacent to the park. Steep slopes in the vicinity of White Wolf Lodge could experience failures during such a seismic event.

Soils of the area are primarily derived from decomposition of the underlying granitic bedrock and are generally of similar chemical and mineralogical composition. Surface soils at the site and in many areas in Yosemite National Park consist primarily of granitic sands in various stages of decomposition. The extensive glaciation of the region has resulted in typically poorly developed topsoil and soil horizons. Soils generally have low shrink-swell potential because of their minimal clay content but high erosive potential because they are generally thin and sandy.

Environmental Consequences

Impact Assessment Methodology. Geology and soils analysis was based on a qualitative assessment of generalized soil types. Types of geologic and soil impacts include those resulting from soil removal, profile mixing, compaction, erosion, contamination, and restoration.

Beneficial impacts would protect soils from erosion or restore natural soil conditions; adverse impacts would degrade chemical or physical properties of soils or result in the loss or temporary removal of soils. Impact threshold definitions for geology and soils are as follows:

Negligible — Impacts on geology and soils, such as excavation of bedrock or removal of topsoil, would not occur or would be so slight as to be immeasurable.

Minor — Impacts on geology and soils, such as excavation of bedrock or removal of topsoil, would occur but would be barely measurable or perceptible.

Moderate — Impacts on geology and soils would be readily apparent. Mitigation would probably be necessary to offset adverse impacts.

Major — Impacts on geology and soils would be readily apparent and would substantially change the soil or geologic characteristics of the area. Extensive mitigation would probably be necessary to offset adverse impacts, and its success could not be guaranteed.

Alternative 1: No Action

Ongoing impacts from soil compaction from visitor use and erosion due to poor site drainage would continue. Foot traffic has caused soil compaction due to the thin layer of soil and hard underlying granitic rock. Compaction reduces the ability of surface water to infiltrate the soil and increases surface runoff, eroding the thin layer of soil and creating small gullies. Overall, under Alternative 1 there would be local long-term minor adverse impacts on soils. The failure to rehabilitate the Main Lodge building and Duplex Cabins would also make them more susceptible to seismic events, resulting in a site-specific, long-term, moderate adverse impact on geologic hazards.

Alternative 2: Rehabilitation (Preferred Alternative)

Under Alternative 2, proposed foundation work for the Main Lodge building and Duplex Cabins would affect shallow subsurface geology and local soils. Excavation of bedrock and soil around the structures would occur during foundation replacement and drainage work. The proposed path between the Duplex Cabins and the Main Lodge building and installation of the new restroom and storage units would result in some minimal excavation and grading and some soil disturbance.

Moving, covering, trampling, and compaction of soils by equipment and workers within the construction work zone would also occur during construction; however, some of the soil that would be affected has been previously disturbed by repair, maintenance, and construction activities. Local soil compaction would decrease soil permeability, reduce soil moisture content, and lessen its water storage capacity. Activities under Alternative 2 would result in reduced potential erosion around buildings and improved structural resistance to seismic shaking, resulting in a site-specific, long-term minor beneficial impact on geologic hazards. Overall there would be site-specific, short-term, minor adverse impacts on geology and soils during rehabilitation activities and site-specific, long-term, minor adverse impacts on geology and soils following rehabilitation due to installation of the aprons.

Cumulative Impacts on Geology and Soils

Adverse impacts as a result of other past and ongoing actions on geology include bedrock excavation and on soils include compaction, soil mixing, and soil loss. Other impacts include an overall decrease in soil infiltration, where hardening of surfaces (walkways, parking areas) has occurred. Some restoration and development projects could occur within the park and project vicinity. These projects could contribute to both beneficial and adverse impacts on soils. Because most of the park is designated wilderness that continues to be undisturbed by human impacts, the amount of area

affected by past and possible future projects is not substantial, and soil impacts therefore would be minor when considered in a regional context. Alternative 1 would contribute a local negligible long-term increment to total cumulative impacts on soils, while Alternative 2 would contribute a local long-term negligible adverse impact on park soils.

VEGETATION

Affected Environment

The project area lies at 7,880 feet above mean sea level and is located in a transitional area between the upper montane and subalpine forest zones. The project site lies between meadow and forest. Forest vegetation in the upper montane zone includes lodgepole pine, red fir, white fir, Jeffrey pine, and sugar pine. The subalpine forest tends to be dominated by lodgepole pine, with lesser amounts of red and white fir, and also includes western white pine, whitebark pine, Sierra juniper, and mountain hemlock. The forest at the White Wolf site is dominated by lodgepole pine.

Across both forest zones, dry open areas support montane chaparral, grasses, and wildflowers. Common shrubs that make up the montane chaparral include greenleaf and pinemat manzanita, buckbrush, bitter cherry, wax currant and sticky currant, bush chinquapin, snowberry, huckleberry oak, mountain misery, and mountain mahogany. Grasses in mountain meadows such as those at the White Wolf site include mountain muhly, bluegrass, needlegrass, and bromes. Upland wildflowers are diverse and include several species of lupine, violet, paintbrush, and groundsel; mountain pride and other penstemon; mountain pennyroyal; and many others.

Environmental Consequences

Impact Assessment Methodology. Determination of the significance of potential impacts on vegetation is based on the context, duration, type, and intensity of impact. Vegetation impact analysis was based on a qualitative assessment of project area vegetation and the impacts anticipated as a result of project implementation. Quantitative analysis was conducted for Alternative 2 to determine areas that were likely to be affected by selective tree thinning and brush removal as well as other aspects of the project.

The essential qualities of native plant communities include their spatial extent, integrity (consistency) of species composition, repeated association with natural features, and vigor in terms of the growth and reproduction of constituent species. Actions that reduce/degrade these qualities are considered to have adverse impacts; actions that preserve or restore these qualities have beneficial impacts. The proposed action has a variety of different components that could impact vegetation, including ground disturbance and vegetation removal, the alteration of drainage patterns, and changes in pedestrian traffic. For this resource, impact intensity definitions are as follows:

Negligible — Native vegetation would not be affected, or impacts would not be measurable.

Minor — Impacts on native vegetation would be detectable. If mitigation is needed to minimize or rectify adverse impacts, it would be relatively simple to implement and have a high probability of success.

Moderate — Impacts on native vegetation would be readily apparent. Mitigation would be necessary to reduce or rectify adverse impacts.

Major— Impacts on native vegetation would be readily apparent and would substantially change the biological value of the native plant community. Mitigation would be necessary to reduce or rectify adverse impacts, and its success could not be guaranteed.

Alternative 1: No Action

Under the No Action Alternative, the existing site areas around the Main Lodge building and Duplex Cabins would not be improved, except for continuation of emergency erosion repairs and routine and periodic maintenance activities. Foot traffic on the site results in some trampling of vegetation and, over time, denudation of vegetation. As a result, impacts from Alternative 1 are expected to have long-term, local minor adverse impacts on vegetation at the White Wolf Lodge complex.

Alternative 2: Rehabilitation (Preferred Alternative)

Vegetation impacts from Alternative 2 would include selective vegetation removal for construction of the path or new buildings, resulting in the loss of a few trees, shrubs, forbs, grasses and other plants. The species of trees and shrubs removed would vary. A variety of trees, shrubs, forbs and grasses grow in the project area (none is considered a special-status species), and it is likely that individuals or small stands of some of these species would be affected. As a result, impacts from Alternative 2 are expected to have long-term, local minor adverse impacts on vegetation at the White Wolf Lodge complex.

Minor short-term and indirect impacts from construction may occur due to plant trampling and soil disturbance from building repairs. However, implementation of construction best management practices would be employed to minimize impacts associated with trampling and erosion.

Cumulative Impacts on Vegetation

Human activities, particularly fire suppression, general visitor use, and traditional park maintenance practices, have altered the structure and composition of park plant communities. These cumulative impacts would not, however, be evident in the proposed project area. In the proposed project area, impacts from Alternative 1 would contribute an indiscernible, local negligible long-term adverse cumulative impact on vegetation, while Alternative 2 would contribute to a local, minor, long-term adverse cumulative impact due to removal of trees.

SPECIAL STATUS SPECIES

Affected Environment

Special status species include species that are listed, proposed, or candidates for listing as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; and other special status species as recognized by the U.S. Fish and Wildlife Service, California Department of Fish and Game, or Yosemite National Park. A U.S. Fish and Wildlife Service species list indicates that two listed threatened species, the delta smelt and Central Valley steelhead, and three candidate species, the Yosemite toad, Sierra Nevada yellow-legged frog, and the fisher, have the potential to occur in the Tamarack Flat quadrangle in which the project area lies. However, the only known occurrences of any of these wildlife species in the vicinity of the project are three historical occurrences of the Sierra Nevada yellow-legged frog (*Rana sierrae*). There are no listed plant species in the project area.

Sierra Nevada yellow-legged frog is a Candidate species for listing under the Federal and California Endangered Species Acts. There are historic observations in the project vicinity and suitable meadow habitat nearby. The frogs occur in mountain meadows, riparian, deciduous, and alpine meadow types, from 5000 to 13,000 feet. Introduction of trout into mountain streams and lakes have

led to species decline throughout their range. Eggs are laid in rivers, streams, ponds, and lakes from May to July, with peak activity in June. Mitigations to avoid adverse effects are provided in Table 2-2.

Environmental Consequences

Impact Assessment Methodology. Determination of the significance of potential impacts on special status species is based on the locality, duration, type, and intensity of impact. The impact evaluation for special status species was based on the following: (1) the known or likely occurrence of a species or its preferred habitat in the vicinity of the project area; (2) the direct physical loss or adverse modification of habitat; (3) the loss or degradation of habitat, such as could occur through avoidance or abandonment due to construction or rehabilitation activity or noise, or the species' sensitivity to human disturbance. For plant species, this could occur due to loss of habitat features such as surface water flows.

Impacts were evaluated through determination of the location of the species or their habitat with respect to the proposed locations of various rehabilitation activities, such as culvert installation, vegetation thinning, etc. Sensitivity of a species to impacts was assessed through consideration of rarity, resilience, population size, and distribution throughout the park.

Surveys specific to this planning effort to identify individuals or populations of special status species have not been performed. Data presented herein are based on field reconnaissance, literature review, the professional knowledge and judgment of park staff, records of observations, published references, and studies of selected species.

Adverse impacts include those that would negatively affect the size, continuity, or integrity of habitat, or result in unnatural changes in the abundance, diversity, or distribution of the species. Conversely, impacts were classified as beneficial if they would positively affect the abundance, diversity, or distribution of the species or the size, continuity, or integrity of habitat. Impact intensity level definitions are as follows:

Negligible — Neither individuals nor habitat of the species would be measurably affected.

Minor — Impacts on individuals or habitat would be measurable or perceptible and local, but there would be no mortality to individuals and no long-term impact on the overall distribution, abundance, or viability of the population. If mitigation is needed to reduce and rectify adverse impacts, it would be relatively simple to implement and have a high probability of success.

Moderate — Impacts would be sufficient to cause mortality to individuals and/or a loss of habitat, resulting in a change in the population or subpopulation (e.g., abundance, distribution, quantity, or viability). However, the impact would remain local and temporary. Mitigation would be necessary to reduce and rectify adverse impacts.

Major — There would be mortality to individuals and/or loss of habitat which would result in a long-term or permanent change in the population or subpopulation (e.g., abundance, distribution, quantity, or viability). Mitigation would be necessary to reduce, rectify, and compensate for adverse impacts, and its success could not be guaranteed.

Special status species impacts that are formally determined under Section 7 of the Endangered Species Act are as follows:

No Impact — The project (or action) is located outside suitable habitat and there would be no disturbance or other direct or indirect impacts on the species. The action would not affect the listed species or its designated critical habitat (USFWS 1998).

May Affect, Not Likely to Adversely Affect — The project (or action) occurs in suitable habitat or results in indirect impacts on the species, but the impact on the species is likely to be entirely beneficial, discountable, or insignificant. The action may pose impacts on listed species or designated critical habitat but given circumstances or mitigation conditions, the impacts may be discounted, insignificant, or completely beneficial. Insignificant impacts would not result in take. Discountable impacts are those extremely unlikely to occur. Based on best judgment, a person would not 1) be able to meaningfully measure, detect, or evaluate insignificant impacts or 2) expect discountable impacts to occur (USFWS 1998).

May Affect, Likely to Adversely Affect — The project (or action) would have an adverse impact on a listed species as a result of direct, indirect, interrelated, or interdependent actions. An adverse impact on a listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions and the impact is not discountable, insignificant, or beneficial (USFWS 1998).

Alternative 1: No Action

The project occurs in or adjacent to suitable Sierra Nevada yellow-legged frog habitat; however the impact on the species under Alternative 1 is likely to be entirely beneficial, discountable, or insignificant. The action may pose impacts but given circumstances or mitigation conditions, the impacts may be discounted, insignificant, or completely beneficial. Under Alternative 1 and per Section 7 of the Endangered Species Act the determination would be “May Affect, Not Likely to Adversely Affect.”

Alternative 2: Preferred Alternative

The Sierra Nevada yellow-legged frog is vulnerable to impacts from construction, including direct mortality from vehicles, construction equipment and movement of rocks and soil during construction. It is also vulnerable to alteration of habitat and disturbance that might disrupt behavior, which could adversely affect breeding. A qualified biologist will survey the site prior to construction to establish whether frogs were breeding in the vicinity and provide specific recommendations to avoid impacts during construction activities (see Table 2-2).

The project occurs in or adjacent to suitable Sierra Nevada yellow-legged frog habitat; however the impact on the species under Alternative 1 is likely to be entirely beneficial, discountable, or insignificant given the limited construction activities, proposed mitigation measures, and unconfirmed status of the species on-site. The actions under Alternative 2 that may pose adverse impacts, namely from construction and the pumping of water around the foundations of the buildings during rehabilitation work, would be mitigated and any impacts may be discounted or deemed insignificant. Under Alternative 2 and per Section 7 of the Endangered Species Act the determination would be “May Affect, Not Likely to Adversely Affect.”

Cumulative Impacts on Special Status Species

Some restoration and development projects would continue to occur within the park and would contribute both beneficial and adverse impacts on special status species. The No Action Alternative and the Preferred Alternative would contribute no cumulative impact. Overall, special status species would benefit as a result of past, present, and reasonably foreseeable actions in the park.

HYDROLOGY AND WATER QUALITY

Affected Environment

Hydrology. Numerous rivers and creeks drain the western Sierra Nevada near the project area; the Tuolumne River to the north is the major drainage for the watershed in which White Wolf Lodge is located. The Tuolumne River drains the entire northern portion of the park, an area of approximately 428,115 acres (669 square miles). It flows into Hetch Hetchy Reservoir, a major water supply for the City and County of San Francisco, before it leaves the park (NPS 2004). In the immediate vicinity of White Wolf Lodge, only a few ephemeral drainages are present. Sheet flow occurs from west to east down-gradient across the landscape and can at times be pronounced given the abundance of bedrock exposed at the surface. Sheet flow due to precipitation and snow melt run-off is currently undermining the Main Lodge building and cabin foundations.

Water Quality. An inventory of water quality data performed by the National Park Service indicated excellent conditions in many parts of the park, but some water quality degradation was noted in areas of high visitor use (NPS 1994).

The park is currently developing a management plans for the Tuolumne Wild and Scenic River (designated in 1987) and its tributaries near White Wolf; White Wolf lies outside the Tuolumne River planning corridor. This planning process will describe the current state of the river and its tributaries; address water quality concerns and instream flow requirements; establish user capacity guidelines; and implement a long-term monitoring strategy for the river corridor (NPS 2010).

Environmental Consequences

Impact Assessment Methodology. Hydrology and water quality impact analysis was based on a qualitative assessment of water resources and impacts likely to be caused by implementation of the proposed White Wolf Lodge rehabilitation project.

Types of water resources impacts include adding constituents to water, such as sediment or contaminated runoff; loss of or additions to the amount of water; changes in the flow of water; and impacts on water-related resources, such as wetlands and floodplains. Beneficial impacts would protect natural flow conditions, water quality, and/or water quantity. Beneficial impacts may include restoration, such as improving streambanks or removing flow impediments such as dams. Adverse impacts would disrupt natural flow, degrade water quality, or decrease water quantity. Impact intensity definitions for hydrology and water quality are as follows:

Negligible — Hydrology of the area would not be affected, or impacts would not be measurable. Any impacts on the hydrologic regime would be slight and short term. Water quality would not be affected, or impacts would not be measurable and would not affect beneficial uses of receiving waters.

Minor — Impacts on hydrology, such as an increase or decrease in surface or groundwater flow, would be detectable. If mitigation were needed to offset adverse impacts, it would be relatively simple to implement. Impacts on water quality would be detectable and could affect beneficial uses of receiving waters. If mitigation is needed to offset adverse impacts, it would be relatively simple to implement.

Moderate — Impacts on hydrology would be readily apparent. Mitigation would probably be necessary to offset adverse impacts. Impacts on water quality would be readily apparent and would

affect beneficial uses of receiving waters. Mitigation would probably be necessary to offset adverse impacts.

Major — Impacts on hydrology would be readily apparent and would substantially change the hydrologic regime over the area. Similarly, impacts on water quality would be readily apparent and would substantially change beneficial uses of surface or groundwater. Substantial mitigation would probably be necessary to offset adverse impacts, and its success could not be guaranteed.

Alternative 1: No Action

There would be no impacts on hydrology and water quality under Alternative 1.

Alternative 2: Rehabilitation (Preferred Alternative)

As previously mentioned sheet flow is undermining the Main Lodge building and Duplex Cabin foundations and in some cases rotting out the sill plates. The proposed rehabilitation plan would include the construction of a curb apron to direct water around these buildings. The curb would be designed to blend in with the natural landscape rather than appear as a typical roadside or urban curb. The expansion of the site's hardscape footprint due to the Main Lodge building and cabin Architectural Barriers Act and Americans with Disabilities Act compliance and kitchen storage area improvements, and construction of a new restroom, would further limit infiltration of precipitation and down-gradient groundwater recharge. Impacts on hydrology and water quality under Alternative 2 would be site-specific, short-term, minor, and adverse during rehabilitation and site-specific, long-term, minor, and adverse following rehabilitation as a result of the disruption of natural sheet flow and infiltration from the installed apron and expanded hardscape.

Cumulative Impacts on Hydrology / Water Quality

Other visitor uses and facilities in the park and project area contribute to sedimentation and runoff, including oil and other contaminants from motor vehicles and litter that can enter drainages and affect water quality. Some restoration and development projects would continue to occur within the park and would contribute both beneficial and adverse impacts on water quality. Nonhuman factors, such as natural erosion of exposed soils, can also affect water quality. The No Action Alternative would contribute no cumulative impact. Under Alternative 2, there would be short-term local negligible to minor adverse impacts on water resources during rehabilitation and long-term local minor adverse impacts from artificial channeling. Overall, water resources would benefit as a result of past, present, and reasonably foreseeable actions in the park.

ARCHEOLOGICAL RESOURCES

Dates for the earliest human occupation in the park are inconclusive; it is generally agreed that humans were present in the Sierra Nevada around 9,500 years ago, based on recovery of fluted projectile points (Hull and Moratto 1999). Archeological studies in the northern area of the park at Tuolumne Meadows suggest that occupation in the area dates back at least 6,000 years (Hull *et al.* 1995).

In 1979, the White Wolf Archeological District was identified based on its local and regional significance for prehistoric and protohistoric archeology, and determined by the National Park Service to be eligible for listing in the National Register of Historic Places under Criterion d, for its information potential. According to *Yosemite: the Park and its Resources* (NPS 1987), the White Wolf Archeological District was recorded on January 21, 1980, and listed in the National Register of Historic Places. A report on findings from the 1985 and 1986 Eastern Tioga Lodge Archeological Survey included White Wolf. In the Historic period, Euro-American land use practices included

herding, grazing, homesteading, use of trails, mining, lodge construction, tourism, and concessioner development.

Area of Potential Effect. The archaeological Area of Potential Effect (APE) was defined for the proposed action in accordance with the implementing regulations for Section 106 of the National Historic Preservation Act. The APE for the proposed rehabilitation project includes the portion of White Wolf Lodge and its associated features (figure 2). Archeological surveys have determined that there are no archeological sites around the Main Lodge building or Duplex Cabins. There is a site north of the campground and some sites south of the meadow in the White Wolf archeological district; however, the Lodge is outside of the boundary of this district.

Archeological sites throughout the park show a clear temporal range of technological differentiation; they suggest a wide ranging trade network, a population replacement, and use of fire to modify the environment. Technological change at archeological sites throughout the park is consistent with changes noted throughout the Sierra Nevada, and includes the shift from atlatl and dart hunting to the use of bow and arrow, as well as the change from flat milling stones for hard seeds to mortar and pestles for acorn processing. To date, there are over 1,600 archeological sites documented throughout the park and at the El Portal Administrative Site (NPS 2007).

Due to deep snows that cover the northern portion of the park during the winter months, use of the White Wolf Lodge region was likely seasonal and related to hunting and subsistence activities to supply more permanent occupations at lower elevations (Montague 2010). The majority of the sites found near the APE reflect these seasonal patterns of use; site types are dominated by lithic scatters and bedrock milling features.

Environmental Consequences

Impact Assessment Methodology. Procedures for assessing adverse effects on historic properties (i.e., cultural resources listed in or eligible for listing in the National Register of Historic Places) are discussed in regulations of the National Historic Preservation Act (36 CFR 800). An action results in an adverse effect on a historic property when it alters the resource's characteristics that qualify it for inclusion in the National Register of Historic Places. Adverse effects are most often a result of physical destruction, damage, or alteration of a resource; alteration of the character of the surrounding environment that contributes to the resource's eligibility; introduction of visual, auditory, or atmospheric intrusions out of character with the resource or its setting; neglect of the resource resulting in its deterioration or destruction; or transfer, lease, or sale of the property. Although cultural resources impacts are also initially characterized as noted for other resources to fulfill National Environmental Policy Act requirements, the principal assessment for National Register of Historic Places-eligible or listed resources applies the definitions listed below, and makes a formal determination of effect under Section 106 of the National Historic Preservation Act. In accordance with *Management Policies 2006* and the 1999 Programmatic Agreement, this analysis fulfills the responsibilities of the National Park Service under Section 106 of the National Historic Preservation Act.

No historic properties affected — There are no historic properties affected in the APE; or, there are historic properties in the APE, but the undertaking would have no impact on them.

No adverse effect — The undertaking would result in an impact on a historic property, but the impact does not meet the criteria for adverse effect in 36 CFR 800.5(a)(1) and would not alter characteristics that make the resource eligible for listing in the National Register of Historic Places. The undertaking is modified or conditions are imposed to avoid or minimize adverse effects.

Adverse effect — The undertaking would alter, directly or indirectly, the characteristics of a property that make it eligible for listing in the National Register of Historic Places. An adverse effect may be resolved in accordance with the Stipulation VIII of 1999 Programmatic Agreement, or by developing a memorandum of agreement or site-specific programmatic agreement in consultation with the SHPO, ACHP, American Indian tribes, other consulting parties, and the public to avoid, minimize, or mitigate adverse effects (36 CFR 800.6(a)). Under the terms of Yosemite National Park's 1999 *Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations, and Maintenance, Yosemite National Park, California*, data recovery can resolve adverse effects impacts on archeological properties eligible for listing on the National Register of Historic Places under Criterion D. Some archeological sites are eligible as traditional cultural places under Criterion A; however, for these such mitigation may not be sufficient or appropriate.

Alternative 1: No Action

Under the No Action Alternative, there would be no adverse effect on potentially eligible archeological resources. Routine Maintenance of White Wolf Lodge would not result in additional ground disturbance outside of already disturbed areas. Monitoring of nearby archeological sites would continue as established in the 1999 Programmatic Agreement (NPS, California SHPO, and AHCP 1999). There would be a “no historic properties affected” determination under this alternative.

Alternative 2: Rehabilitation (Preferred Alternative)

Ground disturbing activities associated with this alternative do not have the potential to impact any known archaeological sites within the APE. The majority of other activities associated with the proposed project would occur in previously disturbed areas that are unlikely to exhibit evidence of archeological resources. If the Preferred Alternative (Alternative 2) is implemented, no archeological sites would be adversely impacted. There would be a “no historic properties affected” determination under this alternative.

Section 106 Summary

Under the No Action Alternative, there would be no adverse effect on potentially eligible archeological resources. There would be a “no historic properties affected” determination under this alternative. If the Preferred Alternative (Alternative 2) is implemented, no archeological sites would be adversely impacted. There would be a “no historic properties affected” determination under this alternative.

Cumulative Impacts on Archeological Resources

Archeological resources around the White Wolf Lodge and elsewhere in the park have likely been adversely impacted to varying degrees from past construction-related disturbances (prior to enactment of archeological resources protection laws); visitor impacts and vandalism; and erosion and other natural processes. Because mitigation measures would be employed to minimize impacts on potential unidentified cultural resources in other proposed and future park projects, it is likely that these would protect archeological resources from additional impacts. There would be no rehabilitation-related contributions to cumulative impacts on archeological resources from Alternative 1; however, any current adverse impacts on archeological resources would continue. Because of mitigation measures implemented in accordance with the park's 1999 *Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction,*

Operations, and Maintenance, Yosemite National Park, California, Alternative 2 would not be expected to contribute to cumulative impacts on archeological resources. There would continue to be no adverse effect on archeological resources.

HISTORIC STRUCTURES AND CULTURAL LANDSCAPES

Affected Environment

To take into account the project's potential to affect significant historic structures or cultural landscapes; an Area of Potential Effect was defined for the proposed action in accordance with the implementing regulations of Section 106 of the National Historic Preservation Act. The Area of Potential Effect for the proposed rehabilitation includes the Main Lodge building and the two Duplex Cabins and immediate surroundings where the proposed path, comfort station, and refrigerated storage unit would be constructed (see figure 2 for site map).

The Main Lodge building at White Wolf Lodge has been determined eligible for listing in the National Register of Historic Places (consensus DOE 2004) under Criterion C (Design/Construction) as an example of the Rustic Architecture that was common to Yosemite hotels and unique to western national park system units. The period of significance dates from 1915 to 1938. At that time the Main Lodge building was the only building at White Wolf Lodge determined eligible. It is historically significant for its original design and function as a lodge for motorists on the Tioga Road. The associated Duplex Cabins and storage building were determined to be non-contributing resources. Since then, however, the National Park Service has reassessed the Duplex Cabins and determined them to be eligible for listing in the National Register of Historic Places for the purpose of this undertaking.

The Duplex Cabins date to the property's period of significance and are consistent with the vernacular construction of the White Wolf Lodge. The Duplex Cabins were constructed as tourist lodging, and therefore embody the transformation of White Wolf from a private homestead to a travelers' lodge.

Character-Defining Features and Spaces

For a property to be eligible for the National Register of Historic Places under eligibility criteria related to type, period, or method of construction' the essential, or character-defining, features that enable the property to convey its historical identity must be evident. These distinctive character-defining features are the physical traits that commonly recur in property types and/or architectural styles. To be eligible, a property must retain enough of its character-defining features to be considered a true representative of a particular type, period, or method of construction, and these features must also retain sufficient integrity to convey the property's historic significance. Characteristics can be expressed in terms such as form, proportion, structure, plan, style, materials, spaces, or spatial relationships.

The character-defining features are not specifically identified in the White Wolf Lodge consensus Determination of Eligibility documentation, but rather are features that, according to the assessment in the *White Wolf Historic Structures Report* (Page & Turnbull 2011a), characterize the significance of the resource, depict the vernacular style, and should be considered for inclusion in an National Register of Historic Places nomination form. The Main Lodge building and Duplex Cabins are understood as resources that should be considered as a complex, not a collection of individual features. As previously mentioned, the Main Lodge building has been determined to be eligible for listing on the National Register of Historic Places and also possesses historic significance at the local level.

Therefore, White Wolf Lodge is considered a historic property under Section 106 of the National Historic Preservation Act, and would be managed per National Park Service *Director's Order #28: Cultural Resource Management Guidelines*. The Main Lodge building was originally constructed as a homestead sometime between 1884 and 1926. The building was converted into a lodge in 1926, and three Duplex Cabins were constructed at that time (one collapsed in 1968 and was not rebuilt). The White Wolf property was purchased by the National Park Service in 1951. Since that time, the Lodge has been operated by the park concessioner, and the buildings have undergone alterations to improve operations at the facility. During the 1968-1969 winter season, the Main Lodge building collapsed and was subsequently rebuilt to be consistent with its 1968 appearance and many of the building's materials are not original. The primary building performance concerns relate to the foundations and floor framing. Severe decay of wood structural members and the displacement of support piers and footings have compromised the structural integrity of the buildings.

Other project components that are important include the following:

- Architectural Barriers Act and Americans with Disabilities Act accessibility upgrades
- Replacement of the power distribution system and electrical panels
- Site grading and drainage/foundation improvements to minimize flow of water under the buildings

Environmental Consequences

Effects Assessment Methodology. Historic building, structure, and cultural landscape impacts associated with the proposed project were analyzed qualitatively, in accordance with 36 CFR 800.5(a)(1) criteria for assessing adverse effect, based on their potential eligibility for listing in the National Register of Historic Places and the modifications that would affect character-defining features (features that qualify the structures or landscapes for inclusion in the National Register of Historic Places). Historic structures and cultural landscapes for which a determination of eligibility has not been completed were considered potentially eligible.

Pursuant to Director's Order 12 (sections 2.14(6) (3), 6.2 F, and 6.3 F and Appendix 3); 40 CFR 1508.7, 1508.8, and 1508.27; and 36 CFR 800.8, effect intensity, duration, context, and type as they relate to historic properties are determined using the criteria established in 36 CFR Part 800. When an action results in an alteration to the characteristics of a cultural resource that qualifies it for inclusion in the National Register of Historic Places as a historic property, the action is considered to have an adverse effect under Section 106 of the National Historic Preservation Act. The National Historic Preservation Act defines three types of effects as applied to historic properties. These include no historic properties affected, no adverse effect, and adverse effect.

No Historic Properties Affected — A “no historic properties affected” determination indicates that no historic properties are in the APE or that there are historic properties in the APE, but the undertaking would not alter the characteristics that qualify it for inclusion in or eligibility for the national register.

No Adverse Effect — A no adverse effect determination indicates that there would be an effect on the historic property by the undertaking, but the effect does not meet the criteria of adverse effect in 36 Code of Federal Regulations 800.5(a)(1) and would not alter any of the characteristics that make it eligible for listing on the national register in a manner that would diminish the integrity of the historic property. Operations, maintenance, rehabilitation, restoration, and preservation actions typically fall under this no adverse effect category.

Adverse Effect — An adverse effect indicates that the undertaking would alter, directly or indirectly, any of the characteristics that qualify it for inclusion in the national register in a manner that would diminish the integrity of the property. An adverse effect may be resolved in accordance with Stipulation VIII of the park's 1999 Programmatic Agreement among the National Park Service, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding planning, design, construction, operations, and maintenance of Yosemite National Park (NPS 1999).

Alternatively, adverse effects can be resolved by developing a memorandum of agreement or programmatic agreement among the National Park Service, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation, in consultation with the associated American Indian tribal governments, other consulting parties, and the public (36 CFR 800.6).

Alternative 1: No Action

Under Alternative 1, existing features of the site would remain Lodge and would continue to receive the current level of maintenance and upkeep. The potential for an adverse effect under Alternative 1 exists if the Main Lodge building and Duplex Cabins suffer from degraded conditions of site features that would threaten and diminish the condition of the listed Main Lodge building and the NRHP-eligible cabins. However, current maintenance and upkeep strategies are capable of maintaining the existing state of the building and its features, resulting in effects that are not adverse.

Under Alternative 1, regular maintenance and upkeep of the buildings would continue to occur. As the No Action Alternative would not alter, directly or indirectly, any of the characteristics of the buildings that qualify them for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association, Alternative 1 would have no adverse effect.

Alternative 2: Rehabilitation (Preferred Alternative)

Alternative 2 proposes a rehabilitation program that includes new construction; structural, weather envelope, life-safety, and electrical systems upgrades; as well as overall site and building accessibility. However, the proposed activities would alter some of the characteristics that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. This project will have no effect to the historic Great Sierra Wagon Road.

Under the rehabilitation alternative, the adverse effects on the historic structures and the cultural landscape are linked to associated cultural alterations of the character-defining features and finishes of the Main Lodge building, Duplex Cabins, and associated cultural landscape. Impacts on subsurface cultural deposits are not anticipated during ground disturbing activities associated with foundation improvements, pathway improvements, and construction of the new cold-storage building and new public restroom. The building additions for both the Main Lodge and the Duplex Cabin have been designed in a manner consistent with the application of the Secretary of the Interior's Standards for Rehabilitation. Specific actions affecting the historic properties are as follows:

Duplex Cabin 1/2

- Addition to the structure measuring 5 feet by 20 feet with approximately 100 extra square feet. Currently, the cabin does not meet accessibility standards.
- Change the pitch of the roof and the west façade.

Main Lodge Building

- Adding a food storage structure on the west facade of the existing structure measuring 24 feet by 12 feet. Currently food storage is located in separate trailers.
- Removing the storage shed attached to the west façade of the building including the addition of a 36 inch doorway connecting the kitchen to the refrigerated food section measuring approximately 13 feet by 15 feet.
- Constructing a foundation around the perimeter of the building. Currently the structure is supported by piers that are failing. A new foundation will eliminate water flow under the structure.

Public Restroom

- Adding an accessible, unisex structure that measures approximately 8 feet by 8 feet in the north end of the existing, disturbed parking area. This restroom will provide accessible facilities to Lodge guests and daytime guests that is away from the Main Lodge building and Great Sierra Wagon Road.

Landscape

- Install a 3-foot hardened, compacted path meeting accessibility standards that runs between the Main Lodge building, the parking area and the Duplex Cabin. Currently, there is no accessible path.
- Install 70 feet of decomposed granite curbing alongside the path to meet the grade between the Main Lodge building and the public restroom.
- Install 50 feet of granite curbing from the public restroom and the Duplex Cabin to meet the 8% requirements for accessibility.
- Install two sections of metal pipe railing totaling 50 feet along raised pathways.

Section 106 Summary

Under Alternative 2 the park will apply standard mitigating measures in accordance with the *1999 Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations and Maintenance, Yosemite National Park, California.*

Cumulative Effects on Historic Properties

The historic Main Lodge building, Duplex Cabins, and cultural landscape have sustained previous loss, alteration, or replacement. The impacts from past actions in combination with those of Alternative 1 would continue to result in effects on historic properties and the cultural landscape, but in the short term would have no adverse effect on the eligibility of these resources for the National Register of Historic Places. If, however, under Alternative 1, the Lodge is allowed to continue to deteriorate, there could be an adverse cumulative effect on the Main Lodge building as a historic resource and cultural landscape, which would be mitigated based on the park's 1999 programmatic agreement. Under Alternative 2, the building and accessible pathways proposed for Duplex Cabin 1/2 would be a contribution to adverse cumulative impacts.

VISITOR EXPERIENCE

Affected Environment

Visitor services offered by the park concessioner at White Wolf include overnight accommodations (Duplex Cabins and tent cabins), dining, retail sales, and public restrooms. There is a variety of recreational opportunities accessible from White Wolf Lodge, and the site is used by many visitors wanting to explore the high country off of Tioga Road. Those staying at White Wolf Lodge can

readily access some of the most popular recreational areas in the Sierra Nevada including Tuolumne Meadows, Tenaya Lake, Olmsted Point, and the John Muir and Pacific Crest Trails. Auto touring, sightseeing, photography, interpretive displays, guided tours, walking, hiking, backpacking, climbing, picnicking, camping, fishing, and swimming are some of the more common activities at the site and along Tioga Road.

Environmental Consequences

Impact Assessment Methodology. Assumptions used in evaluating visitor experience impacts for the alternatives include the following:

- Existing facilities have been maintained in response to visitor demand and needs for food service, retail service, overnight lodging, and comfort stations.
- Anticipated changes in visitor experience would represent an impact.
- Anticipated changes in visitor service level (such as increased safety conditions) would represent an impact.

Beneficial impacts would occur as a result of enhanced quality of visitor experience and service. Adverse impacts would occur as a result of reduced availability or condition of the Duplex Cabin units, inefficient or reduced level of kitchen service, and lack of accommodation for the disabled. The impact thresholds are as follows:

Negligible — Impacts would result no change or little noticeable change in visitor experience.

Minor — Impacts would result in changes in current experiences, but without appreciably limiting or enhancing critical characteristics (critical characteristics are those elements of an activity that are most important to those who pursue it; for example, it may be important to visitors to be able to drive to lodging in the park).

Moderate — Impacts would change the current experience appreciably (i.e., changes to one or more critical characteristics, or appreciable reduction/increase in the number of visitors).

Major — Impacts would eliminate or greatly enhance multiple critical characteristics or greatly reduce/increase visitor use.

Alternative 1: No Action

Under Alternative 1, the Main Lodge building and Duplex Cabins would not be improved, except for continuation of emergency repairs and routine and periodic maintenance activities. In the short term, Alternative 1 would maintain the status quo of the White Wolf Lodge visitor experience. Occasional routine maintenance actions under Alternative 1 would result in negligible adverse impacts on visitor experience and recreation in the short term. Mobility-impaired visitors would not be able to safely access the Main Lodge building, grounds, public restrooms, or a Duplex Cabin unit, which would constitute a moderate adverse impact on visitor experience. Kitchen operational efficiency would not be improved, and aging mechanical, electrical, and plumbing systems would not be updated, potentially resulting in decreased visitor satisfaction with services and accommodations.

In the long term, by not implementing electrical and other safety improvements proposed under Alternative 2, continued deterioration would likely lead to more frequent or extended emergency repairs resulting in a site-specific, long-term moderate adverse impact on visitor experience. In

addition, continued deterioration of the Main Lodge building could result in increased frequency of service interruptions or temporary closures of cabin units, restrooms, and dining room for repairs.

Alternative 2: Rehabilitation (Preferred Alternative)

Improvements to visitor experience under Alternative 2 would include the construction of accessible paths between the Duplex Cabins and the Main Lodge building (figure 9), construction of an accessible public restroom (figure 12), parking area accessibility improvements, and the modification of one of the existing Duplex Cabin units to make it accessible in accordance with the Architectural Barriers Act and Americans with Disabilities Act of 1990 Accessibility Guidelines (figure 11). The proposed improvements to the kitchen may result in more efficient food service for visitors to the Lodge. Rehabilitation of visibly deteriorated interior and exterior finishes at the Main Lodge building and cabins, and screening of non-historic service facilities from view would maintain the historic sense of arrival and emphasize the character-defining features of the historic buildings.

The Main Lodge building and Duplex Cabins would be closed during rehabilitation construction during the summer of 2013, depending on funding, resulting in a site-specific, short-term moderate adverse impact on visitor experience. Several long-term beneficial impacts on visitor experience would occur with implementation of Alternative 2. The rehabilitation of the Lodge complex would beneficially affect visitor experience by providing more efficient services, improved accessibility, and a new restroom. Therefore, implementation of Alternative 2 would be expected to result in moderate beneficial impacts on visitor experience and recreation over the long term.

Cumulative Impacts on Visitor Experience

Over the long term, new facilities in the park could continue to be added (e.g., the Yosemite Institute environmental education center) or old facilities could be removed (e.g., in the Curry Village rockfall zone) or improved (e.g., The Ahwahnee), resulting in negligible to minor adverse and beneficial cumulative impacts on visitor experience. Because White Wolf Lodge would continue to deteriorate if not rehabilitated, Alternative 1 would continue to contribute to a long-term minor adverse impact on visitor experience, access, and opportunities due to system failures, repairs, and operational inefficiencies. Alternative 2 would contribute short-term moderate to major adverse impacts (closure during rehabilitation) and minor long-term beneficial impacts on visitor experience.

PARK AND CONCESSIONER OPERATIONS

Affected Environment

Yosemite National Park's Division of Facilities Management staff is responsible for the operation and preventative and corrective maintenance of park infrastructure, including roads; trails; and water, wastewater, and electrical utility systems. The division performs preventive and corrective maintenance on utility infrastructure throughout the White Wolf Lodge area, which includes the water supply system, and the wastewater disposal infrastructure. The National Park Service also maintains the roads and parking lot at the site.

The concessioner is generally responsible for operating and maintaining the White Wolf Lodge and associated buildings. Building maintenance includes seasonal repairs due to water damage, painting, roofing, deck repairs, temporary drainage remedies, flooring replacement, and the upkeep of mechanical, electrical, and plumbing systems in all the buildings used for concessioner services. Mechanical and electrical systems throughout the buildings are dated and need to be repaired, upgraded, or replaced. Most of the kitchen, plumbing, and heating systems are outdated and have exceeded their expected service lifetimes.

Environmental Consequences

Impact Assessment Methodology. Impacts on park and concessioner operations were considered in order to disclose the degree to which implementation of the alternative would affect park concessions management strategies, methods, costs, staffing, and visitor services. Impact intensity definitions for this resource category are as follows:

Negligible — Impacts on park and concessioner operations would be largely unnoticed by staff and the visiting public. Existing programs and activities would remain Lodge essentially unchanged. With negligible impacts, there would not be a measurable difference in costs from existing levels.

Minor — Park and concessioner operations would be affected, but the impacts would be limited in scope and not generally noticed by visitors. Increases or decreases in the park's operating costs and staffing workload would require some realignment of funds, but would not require substantial changes in the park's overall operating budget. With minor impacts, measurable additions or reductions in cost would be less than 10% of existing levels.

Moderate — Concessioner operations would be measurably affected, and the impacts would be noticeable to some visitors. Increases or decreases in the park's operating costs and/or workload would require realignment of funds and would alter the scope or quality of some programs. With moderate impacts, additions or reductions in cost would be between 10% and 20% of existing levels.

Major — Impacts on park and concessioner operations would be widespread and readily apparent to most visitors. Increases or decreases in operating costs and/or workload would require substantial changes in funding allocation and would alter the scope and quality of multiple programs or basic operational activities. With major impacts, additions or reductions in cost would exceed 20% of existing levels.

Impacts were evaluated in terms of whether they would be beneficial or adverse to park and concessioner operations. Adverse impacts represent an increase in operating costs or management activities. Beneficial impacts represent a decrease in operating costs or management activities.

Alternative 1: No Action

Under this alternative, White Wolf Lodge would remain Lodge in its current condition and no operational improvements would be made with the exception of routine and emergency maintenance. This alternative would not result in comprehensive improvements to White Wolf facilities, and would therefore require increasing component renewal costs as structural deterioration continues and aging mechanical, electrical, and plumbing systems fail. Given the harsh winter conditions at this elevation, major repairs could result in closures during the peak summer and shoulder seasons. Concessioner costs associated with operation and maintenance of White Wolf Lodge (including increased use of staff time, equipment, and available funds) would be expected to increase over time as well, due to the effort required to maintain existing levels of service. Kitchen operations would not be improved to handle peak summer visitor demand for food service more efficiently, and cold-storage units would not be moved closer to the kitchen service entry.

Overall, under Alternative 1, a site-specific, long-term minor to moderate adverse impact on concessioner operations would occur, with annually increasing costs to maintain the Main Lodge building and Duplex Cabins.

Alternative 2: Rehabilitation (Preferred Alternative)

In the short term, the site would be closed during the summer of 2013, depending on available funding, for rehabilitation and construction. In the long term, efficiencies in concessioner operations would be realized from the improved location of cold-food storage units that could be accessed by food service staff without going outside and a new kitchen layout with updated electrical and plumbing services. Commonly early in the season there is a large snow bank between the kitchen and cold-food storage units, which results in water melting and draining into the building and posing a slip hazard to concessioner staff.

The improvements to White Wolf Lodge under Alternative 2 would result in long-term improvements that would reduce the annual maintenance and emergency repair costs at the Main Lodge building and Duplex Cabins over the long term, when compared to existing conditions, resulting in a site-specific, long-term minor to moderate beneficial impact on concessioner operations.

Safety improvements to the Main Lodge building would result in site-specific, long-term moderate beneficial impacts on both park and concessioner operations by reducing the potential for visitor and staff accidents and loss of use of the facilities due to closures for repairs.

Cumulative Impacts on Park and Concessioner Operations

Park and concessioner operations are currently hampered by the lack of adequate facilities in some areas of the park. Given the current condition of the Main Lodge building and Duplex Cabins, the efforts needed to maintain White Wolf Lodge by the concessioner, over time, would remain Lodge the same or increase, with periodic and cyclic maintenance needs. Alternative 1 would contribute a minor to moderate, long-term, adverse increment to total cumulative impacts on park and concessioner operations by drawing time and money away from the management of other park resources to maintain an ever-deteriorating Main Lodge building. Alternative 2 would result in a noticeable decrease in the amount of staff time and park and concessioner operations funding needed to maintain White Wolf Lodge, which would result in a long-term minor to moderate beneficial cumulative impact on park and concessioner operations as these resources could be dedicated to other park priorities.

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CHAPTER 4: CONSULTATION, COORDINATION, PREPARERS, AND REVIEWERS

PUBLIC SCOPING HISTORY

The formal public scoping period for the *White Wolf Lodge and Duplex Cabin Rehabilitation EA* began on August 15, 2011 and ran until September 4, 2011. A Public Open House was held at the Valley Visitor Center Auditorium in Yosemite Valley on August 31, 2011 from 1 p.m. to 4 p.m. Members of the public were invited to submit comments by mail, fax, email, through the Planning, Environment, and Public Comment (PEPC) system, and on comment forms that were made available during the Public Open House. The scoping process was used to define the project purpose and need, and identify issues and impact topics. Public scoping comments were used to assist the park in developing a range of reasonable and feasible project alternatives that meet the purpose and need, including a No Action Alternative, and then analyzing the environmental impacts of each alternative in the environmental assessment. As a result of the public scoping period three comment letters were received, all from individuals. Two of the letters supported the project and one recommended that the structures be removed, which was outside of the scope of the purpose and need.

Based on internal and public scoping comments received, and federal laws, regulations, and executive orders, the NPS determined that an EA was the appropriate level of National Environmental Policy Act (NEPA) compliance for this project.

AGENCY CONSULTATION

California State Historic Preservation Officer/Advisory Council on Historic Preservation

A Programmatic Agreement among the National Park Service at Yosemite, the California State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) regarding Planning, Design, Construction, Operations and Maintenance was developed in consultation with Native American tribes having cultural association with Yosemite National Park and was executed in October 1999 (NPS 1999). In accordance with Stipulation VIII B of the 1999 Programmatic Agreement, the National Park Service initiated consultation in July 2011 with the California State Historic Preservation Officer on this environmental assessment regarding potential actions related to the rehabilitation of the White Wolf structures. The National Park Service will continue consultation with the California State Historic Preservation Officer as necessary through the project planning and implementation.

American Indian Consultation

Yosemite National Park is consulting with American Indian tribes having spiritual cultural associations with the White Wolf Lodge. In January of 2011 a letter was sent to all park associated groups initiating government to government consultation for the White Wolf Lodge Rehabilitation. A site meeting was held on October 27, 2011; no comments were received. The American Indian tribes and groups will receive copies of this environmental assessment for review and comment. Consultation and partnering will continue with the American Indian tribes throughout the planning and implementation of the White Wolf Lodge Rehabilitation project.

U.S. Fish and Wildlife Service

Yosemite National Park consulted with the U.S. Fish and Wildlife Service office in Sacramento and received a Special Status Species List for the *Tamarack Flat* quadrangle on November 3, 2011. The U.S. Fish and Wildlife Service will receive a copy of the environmental assessment during the public

review period. The USFWS may respond with comments and recommendations for clarifications. If, as the project progresses, new information reveals effects of the proposed action that could affect listed, proposed, or candidate species in a manner that causes an effect that was not previously considered; or a new species or critical habitat is designated that may be affected by the proposed action, or if changes in status occur, (such as a formal listing of threatened or endangered status for the Sierra Nevada Mountain yellow-legged frog), consultation will be re-initiated (50 CFR 402.14).

Future Information

Updated information about various aspects of *White Wolf Lodge Rehabilitation* project will be periodically distributed via newsletters, mailings, the project website (<http://www.nps.gov/yose/parkmgmt/wwlodge.htm>) and regional and local news media. There will be a 30-day public comment period on this environmental assessment. Please refer to the project web page for the exact comment review close and end dates. Readers are encouraged to submit comments electronically through the NPS Planning, Environment and Public Comment (PEPC) system. A link to PEPC can be found on the project website.

Written comments regarding this document should be postmarked by the end of the review period and directed to:

Superintendent, Yosemite National Park
 ATTN: White Wolf Lodge Rehabilitation Project
 P.O. Box 577
 Yosemite, California 95389
 Fax: 209-379-1294

To request a printed copy or CD of this environmental assessment (available in limited quantity), please email: Yose_Planning@nps.gov.

Table 4-1. Document Preparers and Reviewers

Name	Role	Title
National Park Service		
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Ron Gaunt	Project Manager	Project Manager
Renea Kennec	Environmental Compliance Specialist	Environmental Compliance Specialist
George Jaramillo	Subject Matter Expert	Historical Architect
Elexis Mayer	Technical Reviewer	Branch Chief, Environmental Planning and Compliance Manager
Jennifer Hardin	Technical Reviewer	American Indian Liason
Delaware North Companies Parks & Resorts		
Devon Rothell	Project Manager	Compliance Manager
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Vicki McMichael	Technical Reviewer	Project Manager
URS Corporation		
Keith Pohs	Project Manager / Writer-Editor	Senior Environmental Planner
Kinzie Gordon	Technical Reviewer	Principal Environmental Scientist

All figures (maps, design drawings, and photographs) courtesy of Page & Turnbull.

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- 2011a *White Wolf Lodge Main Lodge Building and Duplex Cabins Historic Structure Report, Yosemite National Park, California*, 100% Draft prepared for Delaware North Companies Parks & Resorts and the National Park Service, February.
- 2011b *White Wolf Lodge Rehabilitation 80% Design Drawings*, prepared for Delaware North Companies Parks & Resorts and the National Park Service, August 12.
- 2011c *White Wolf Lodge Main Lodge Building and Duplex Cabins Basis of Design Report, Yosemite National Park, California*, prepared for Delaware North Companies Parks & Resorts and the National Park Service, March 22.
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U.S. Fish and Wildlife Service (USFWS)

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