National Park Service
U.S. Department of the Interior
Alaska Regional Office



Richard L. Proenneke Site

LAKE CLARK NATIONAL PARK AND PRESERVE, ALASKA

HISTORIC STRUCTURE REPORT

Front Cover:
Looking at the Proenneke Cabin and cache from the beach of Upper Twin Lake, Hennebery Eddy Architects, 2022.

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0.02 Executive Summary



Image 1: South elevation of the Proenneke Cabin.

INTRODUCTION

The Richard L. Proenneke Site is located in the remote region of Twin Lakes within Lake Clark National Park and Preserve. Accessible only by foot or float plane, the site is approximately 30 miles northeast of Port Alsworth. The site contributes to the 2022 Twin Lake Cultural Landscape Inventory and Report and was listed in the National Register of Historic Places in 2007. The Proenneke Site includes three contributing buildings: the cabin, cache, and woodshed. Constructed as Richard Proenneke's private residence in the wilderness, it now serves as an interpretive exhibit for Lake Clark National Park and Preserve.

In response to growing visitation and increased wear and tear on the buildings, the National Park Service (NPS) commissioned Hennebery Eddy Architects to prepare this Historic Structure Report (HSR). This HSR will serve as a planning and management document for the Lake Clark National Park and Preserve to inform future preservation and maintenance projects on site. It summarizes historical information, documents current conditions, and provides long-term stewardship recommendations and analysis in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties*.

MAJOR FINDINGS

General Site

An increasing number of visitors to the remote site is putting stress on the landscape, buildings, and staff during the summer season. This includes challenges in managing the timing of tour groups, keeping them off the fragile tundra, and reducing their impact while interacting with the buildings - which are primary resources as part of the Richard L. Proenneke Site exhibit.

Providing for more staff on site, managing the number of visitors per day, and defining the boundaries of where visitors are welcome to explore will assist in protecting the site and its resources.

Roofs

The roofs at all three buildings are constructed of spruce pole structures topped with sod. Proenneke originally covered his roofs with moss, which were later replaced by NPS with sod harvested from nearby Emerson Creek. The cache roof was last restored in 2001, and cabin and woodshed roofs were last restored in 2017. Modifications include the addition of treated plywood sheathing, rubber membranes, and copper flashing. Projecting roof purlins show minor end rot beneath flashing. These areas are

treated with borate rods plugged with custom wood plugs. The plugs and rods are migrating out of their holes throughout and should be replaced.

Conditions of the cabin roof around the fireplace chimney presented themselves following the condition assessment site visit. As reported by NPS staff on-site, this area is in poor condition. Copper flashing is lapped incorrectly with unsealed nail penetrations and failed mastic and ice and water shield patches, allowing water to infiltrate the roof layers below. Active leaks are visible on the interior, and tar paper is exhibiting white mold. All roofs appear to otherwise be holding up well and should be maintained in their current configuration.

Exterior Walls

The exterior walls at all three buildings are constructed of spruce logs, peeled with a draw knife by Proenneke. Overall these walls are in good condition with typical signs of weathering, non-structural checking, and areas of missing chinking that are cyclically infilled by seasonal staff. The sill logs have been treated with the same borate rods and custom plugs as the roof purlins. These are also migrating from their holes, with areas of animal damage near their locations. Animal damage should be monitored for continued deterioration, and borate rods should be replaced.

An unidentifiable black residue is evident at exterior walls on both weathered and unweathered logs. It is recommended to send a sample to NCPTT for confirmation of its origin prior to identifying a cleaning method.

Cabin Door

The wood Dutch door at the north elevation of the cabin was crafted by Proenneke, including wood hinges and lock. This door is a celebrated feature of the site, with many visitors seeking to experience the door in person. The door is protected from both human and animal abuse using a “bear door” - plywood and metal shutter. This door is supported by a wood slot within the ground and retractable poles extending to the roof structure above. The door is heavy, removed and reinstalled daily by park staff, and hides the original door from view when park staff are not present. A lighter door that resembles the original door and is mounted to the wall itself would improve the exterior appearance and provide for easier management by staff.

River Stone Chimney

The Cabin’s river stone chimney is settling away from the building at the south elevation, with a vertical crack in the mortar joints. This settlement should be monitored for active movement, and the joint repointed following confirmation that movement is inactive.

PRIORITIZED TREATMENT RECOMMENDATIONS

Treatment recommendations for each building are summarized in the following matrices. Treatments are organized by priority with a brief description of the scope. For further details and products, see the narrative in Part 2.

Treatments are prioritized based on the severity of the condition and urgency of repair. Efficiencies may be gained during execution of the work by grouping systems and components regardless of their priority.

Prioritized Treament Recommendations Summary

GENERAL SITE

Maintenance: Cyclical

System	Component	Recommended Treatment	Alternate
Landscape	Pathways	Maintain gravel trails and small branches lining pathways	
Landscape	Clearings	Maintain clearances and viewsheds surrounding existing buildings	
Landscape	Jetties	Maintain vegetation-free jetties by weeding annually	
Adjacent Cabins	Ranger's Quarters	Maintain use of Hope's and Spike's cabins as single-occupancy quarters	Convert Weisser's cabin to ranger's quarters to increase ranger presence to three
Camping	Campground	Maintain use of designated camping area south of Hope Creek, increasing number of sites as necessary	

PROENNEKE CABIN, FMSS # 58147

Priority 1: Critical *(Immediate - Year Two)*

System	Component	Recommended Treatment	Alternate
Roof	Flashing	Repair copper flashing and damaged underlayment surrounding chimney	
Walls	Logs	Conduct laboratory analysis of exterior black residue to determine proper cleaning technique	
Fireplace	Chimney	Install crack gauge to monitor chimney settlement	
Fireplace	Firebox	Neutralize efflorescence	
Exterior Door	Jamb	Glue cracked wood strike to prevent further damage	

Priority 2: Necessary *(Year Two - Year Five)*

System	Component	Recommended Treatment	Alternate
Roof	Purlins	Remove and reinstall copper purlin caps with cedar breather underlayment	
Roof	Logs	Replace borate rods	
Walls	Logs	Replace borate rods	
Walls	Logs	Dutchman patch damaged logs	
Exterior Door	Door	Monitor animal damage and consider lightly sanding exterior face of door and hinges	
Exterior Door	Bear Door	Replace bear door with lighter compatible door that is easy to remove/install	
Fireplace	Chimney	Repoint cracked mortar joint	

Priority 3: Recommended *(Year Five - Year Ten)*

System	Component	Recommended Treatment	Alternate
Roof	Sod	Install geotextile beneath sod during future reroofing efforts	

Maintenance: Cyclical

System	Component	Recommended Treatment	Alternate
Roof	Sod	Maintain existing sod roof, water as necessary	
Walls	Logs	Monitor annually for checking. Clean checks using compressed air	
Walls	Logs	Infill areas of missing chinking with natural (unoiled) oakum	
Windows	West Window	Maintain existing window and metal grille, cleaning behind the glass pane every 4-5 years	
Exterior Door	Diir	Maintain existing door, wax hinge pins and bushings as necessry	Replace hinge pins and bushings at end of life to match existing
Wood Stove	Chimney	Maintain existing wood stove and chimney	
Interior	Finishes	Maintain existing interior finishes, rake and replace beach gravel floor as necessary	
Fireplace	Firebox	Inspect firebox annually for efflorescence	
Fire & Life Safety	Fire Extinguisher and Smoke Detector	Maintain existing fire extinguisher and smoke detector in cabin	

CACHE, FMSS # 58148

Priority 1: Critical *(Immediate - Year Two)*

System	Component	Recommended Treatment	Alternate
Walls	Logs	Conduct laboratory analysis of exterior black residue to determine proper cleaning technique	

Priority 2: Necessary *(Year Two - Year Five)*

System	Component	Recommended Treatment	Alternate
Roof	Purlins	Remove and reinstall copper purlin caps with cedar breather underlayment	
Roof	Logs	Replace borate rods	
Walls	Logs	Replace borate rods	

Priority 3: Recommended *(Year Five - Year Ten)*

System	Component	Recommended Treatment	Alternate
Roof	Sod	Install geotextile beneath sod during future reroofing efforts	

Maintenance: Cyclical

System	Component	Recommended Treatment	Alternate
Roof	Sod	Maintain existing sod roof, water as necessary	
Walls	Logs	Monitor annually for checking. Clean checks using compressed air	
Walls	Logs	Infill areas of missing chinking with natural (unoiled) oakum	
Exterior Door	Door	Maintain existing door, wax hinge pins and bushings as necessry	
Interior	Finish	Maintain existing finishes	

WOODSHED, FMSS # 58150

Priority 2: Necessary *(Year Two - Year Five)*

System	Component	Recommended Treatment	Alternate
Roof	Purlins	Remove and reinstall copper purlin caps with cedar breather underlayment	
Roof	Logs	Replace borate rods	
Walls	Logs	Replace borate rods	
Walls	Logs	Dutchman patch damaged logs	
Exterior Door	Door	Dutchman patch fractured board	

Priority 3: Recommended *(Year Five - Year Ten)*

System	Component	Recommended Treatment	Alternate
Roof	Sod	Install geotextile beneath sod during future reroofing efforts	

Maintenance: Cyclical

System	Component	Recommended Treatment	Alternate
Roof	Sod	Maintain existing sod roof, water as necessary	
Walls	Logs	Clear perimeter. Monitor annually for checking. Clean checks using compressed air	
Walls	Logs	Infill areas of missing chinking with natural (unoiled) oakum	
Interior	Finish	Maintain existing finishes	
Exterior Door	Door	Maintain existing door, wax hinge pins as necessary	

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0.03 Administrative Data

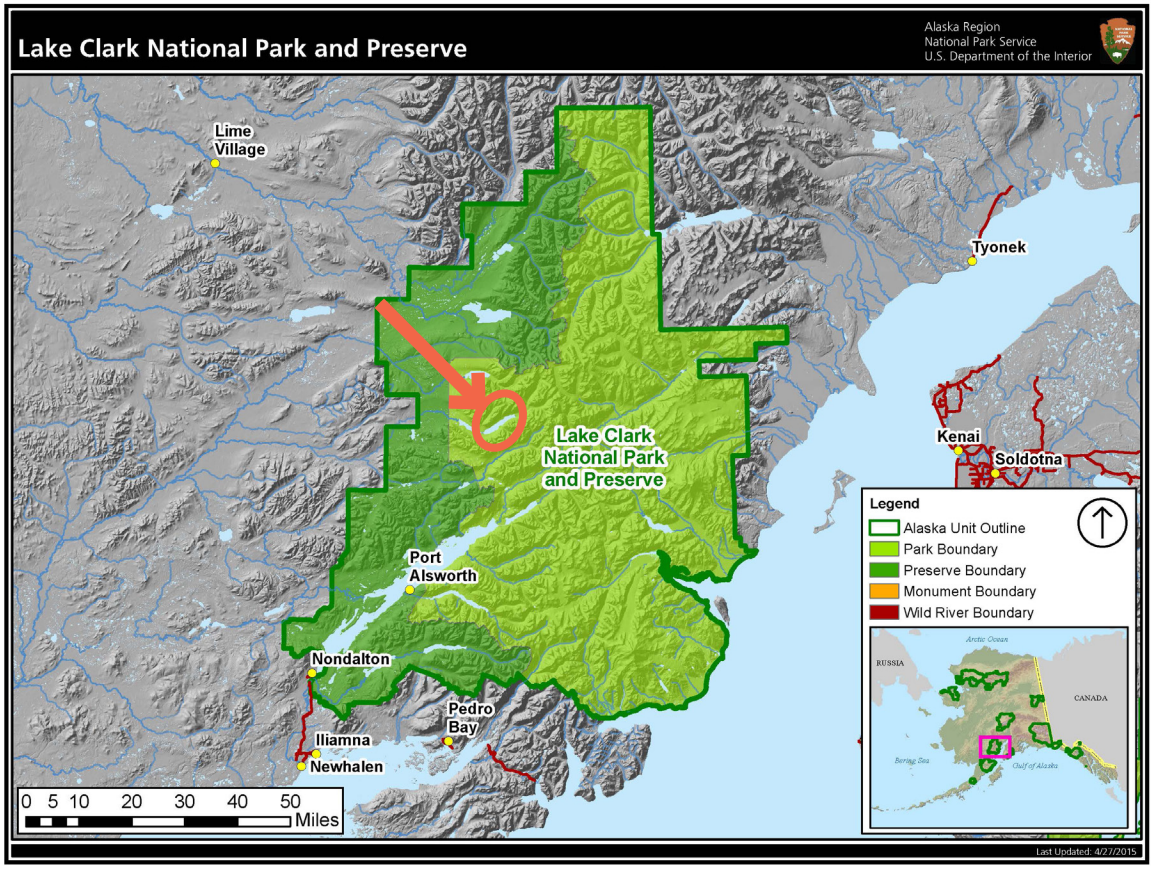


Image 2: National Park Service Map of Lake Clark National Park and Preserve, showing the Richard L. Proenneke Site circled.

LOCATION & DISTRICT DATA

Park Name:	Lake Clark National Park and Preserve
Area:	Richard L. Proenneke Site
Resource Name:	Richard L. Proenneke Site
Historic Name	Richard L. Proenneke Site
Coordinates:	Lat: 60.64506, Long:-153.82097
AHRS* #	XLC-00213
CRIS-HS #	035200, 035201, 035202
Dates of Construction:	1968
Historic Function:	Private residence
Current Function:	Park exhibit

**Alaska Heritage Resource Survey*

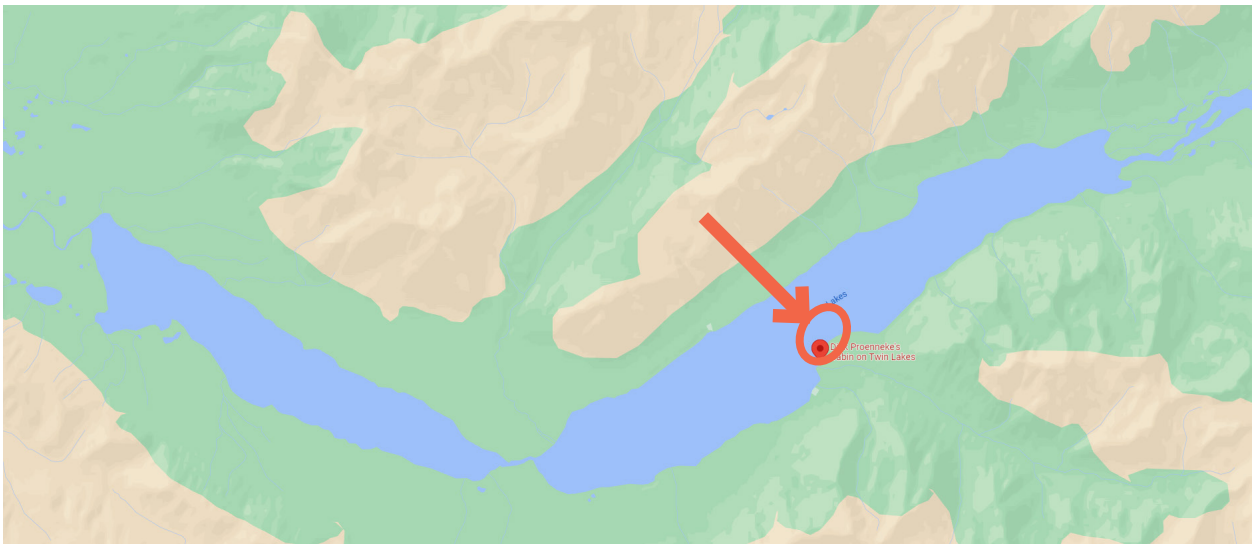


Image 3: Detail map of the Twin Lakes Region within Lake Clark National Park and Preserve, with the Richard L. Proenneke Site identified in red. Google Maps.

CONTRIBUTING BUILDINGS

The following table lists the buildings that are contributing resources to the Richard L. Proenneke Site and are included in this HSR. The table includes identification numbers for NPS's Facility Management System (FMSS), NPS's Cultural Resources Inventory System (CRIS-HS), the Asset Priority Index (API), Facility Condition Index (FCI), and Optimizer bands (OB) for each building.

Building Name	FMSS #	CRIS-HS #	API	FCI	OB
Proenneke's Cabin	58147	035200	80	0.204	1
Cache	58148	035201	58	0.321	3
Woodshed	58150	035202	58	0.236	3

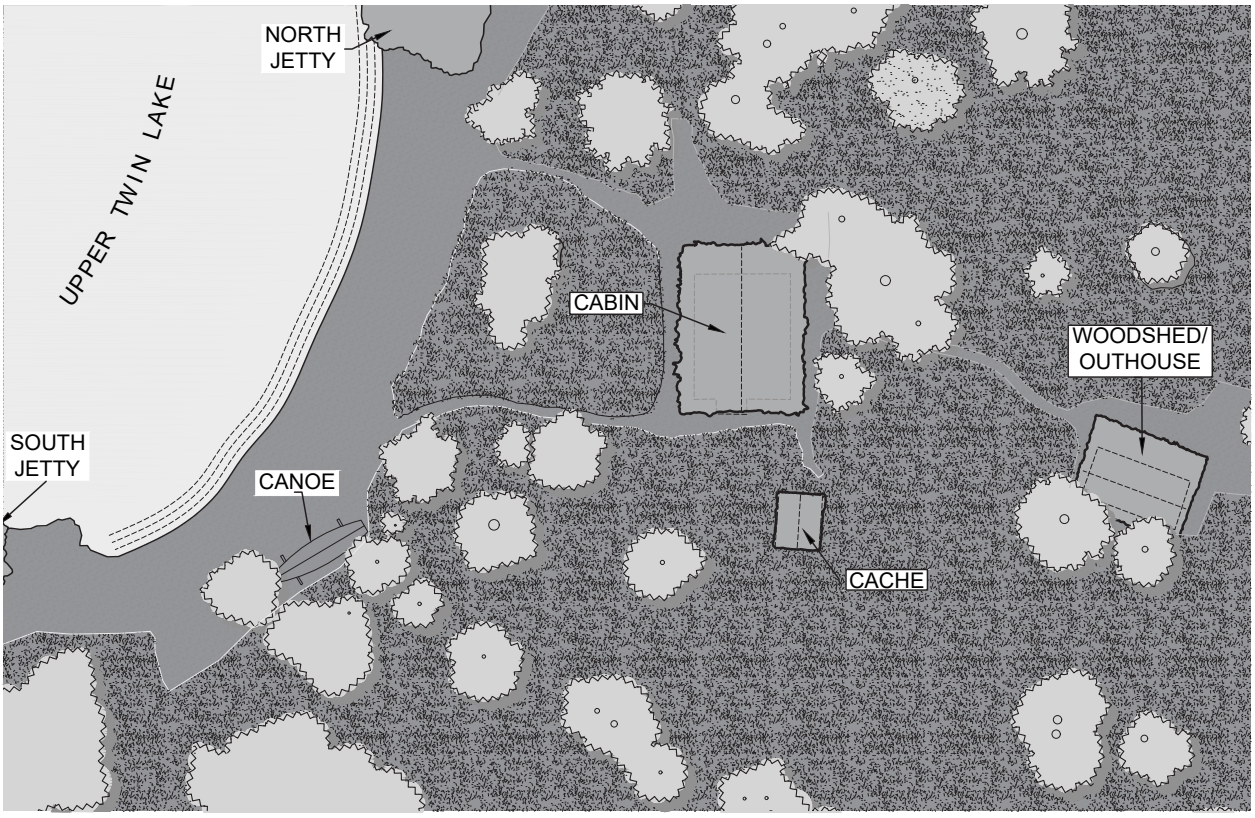


Image 4: Map of the Richard L. Proenneke Site from the 2017 HABS drawing set.

ASSET PRIORITY INDEX (API)

The Department of the Interior (DOI) Asset Management Plan transitioned the Department and its Bureaus/offices from a project-centric to a portfolio-centric management approach. This transition was paired with performance measures within Facility Management such as the Facility Condition Index (FCI) and the Asset Priority Index (API), which provide park managers with metrics to make effective management decisions. Park managers use a matrix of FCI and API to determine which assets support mission critical roles and the condition of those assets.

The API is a balanced scorecard approach that allows park managers to compare the relative importance of facilities in relation to one another. This metric, in conjunction with other asset management considerations, can be used to create an overall asset management strategy. Including the API within a Historic Structure Report demonstrates the importance of these assets park-wide and helps prioritize future projects. It may also highlight where an API may need to be reevaluated if the historic significance of a structure or site has been reassessed while producing the HSR. In general, best practices in Facility Management will determine if a property with a Moderate (API of 12 -50) or Low (API ‹12) API score should be considered for excess or removal if the property's condition decreases.

FACILITY CONDITION INDEX (FCI)

The FCI is the value of all deficiencies divided by the current replacement value. The higher the facility condition index, the worse the condition.

OPTIMIZER BAND (OB)

Optimizer bands are defined by the priority of assets that they contain and their criticality to a park's mission. The Richard L. Proenneke Cabin is identified as one of the highest Priority Assets to Lake Clark National Park and Preserve. It is critical to the operations and mission of the park, has a high visitor use, and is understood to require the highest base funding within the park system.

TREATMENT & USE

The 2022 Cultural Landscape Report identifies the goal of park management to maintain the Richard L. Proenneke Site as an open-air exhibit with opportunities for NPS-led and self-guided visits. It also identifies the responsibility of NPS to provide on-site NPS staff during the summer to facilitate interpretation of the site and to ensure protection of the park's cultural resources. The purpose of this report is to plan for and guide appropriate treatments and repairs to continue the operation and preservation of the site.

CULTURAL RESOURCE DATA

Period and Level of Significance

Significance

The Dick Proenneke site is significant under Criterion B for its association with Richard L. "Dick" Proenneke and his role in raising awareness for the protection of the Twin Lakes area through the construction of his cabin and associated journals, books, and televised public broadcasting of his construction efforts. His personal documentation of the construction of his cabin site and promotion of life in the wilderness had an impact on passing the Alaska National Interest Lands Conservation Act in 1980, which protected over 100 million acres of Alaska including the Twin Lakes area that later became part of Lake Clark National Park and Preserve.

The site was listed in the National Register of Historic Places in 2007 under Consideration G, as the buildings were less than 50 years from initial construction in 1968. The site boundary was expanded in 2016 per the National Register Supplementary Listing Record to include six additional features near Hope Creek, an important resource for Proenneke's day-to-day life.

Period of Significance

The period of significance per the 2007 National Register Nomination Form is 1967-1979. This period represents Proenneke's most significant contributions to the site beginning with the harvesting of logs in 1967 for construction, to the broadcast of the documentary *Alaska, The Closing Frontier* from 1978-1979, which featured Proenneke.

RELATED EXISTING STUDIES

Previous studies of the Richard L. Proenneke Site include:

- *Twin Lakes (Nilqidlen Vena) Cultural Landscape Inventory and Report*, prepared by NPS, 2022.
- *Richard L. Proenneke Site* National Register of Historic Places Nomination, NRIS #06000241, prepared by John Branson (NPS), 2007.
- *Richard L. Proenneke Site* National Register of Historic Places Supplementary Listing Record, NRIS #06000241, 2016.

Documentation in the form of drawings for construction, repair, and renovation projects include:

- *Richard L. Proenneke Site*, Historic American Building Survey (HABS), delineated by John Wachtel, historical architect, (NPS Alaska Regional Office), 2017.

REPORT ORGANIZATION

This HSR is organized in general accordance with the following NPS documents as applicable: NPS-28 Chapter 8: Management of Historic and Prehistoric Structures, Preservation Brief 43: The Preparation and Use of Historic Structure Reports, and the Denver Service Center (DSC) Workflow for HSRs.

An HSR is broken down into three parts:

- Part 1 - Developmental History includes the history and significance of the property and its changes over time. It concludes with identification of character-defining features and a complete description of all building and immediate site components and their conditions.
- Part 2 - Treatment and Use discusses the best overall treatment approach and appropriated uses. It identifies regulatory requirements and lists treatment recommendations that correspond directly with the building component descriptions. Alternative treatment options are included where applicable. Part 2 also includes an assessment of effect for treatment recommendations and alternatives.
- Part 3 - Record of Treatment documents projects completed under the guidance of this HSR and includes a summary of the work and associated technical data.

This HSR includes Parts 1 and 2 only. Part 3 documentation should be completed, including all information outlined in the DSC Workflow for Part 3, as work on the building is completed. This documentation should be appended to this report to maintain a complete building record.

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Developmental History

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1.01 Historical Background and Context



Image 5: Proenneke preparing logs for construction of his cabin. Image from Sam Keith's biography, "One Man's Wilderness."

DEVELOPMENTAL HISTORY + CONTEXT

The Richard L. Proenneke Site is the only homestead within the Twin Lakes region of Lake Clark National Park and Preserve. Richard Proenneke single-handedly constructed a log cabin, cache, and woodshed in 1968 with meticulous precision along the southern shore of Upper Twin Lake, residing on site until 1998. During his time on Upper Twin Lake, he promoted public land conservation within Alaska, using his personal experiences living in the wilderness to support his cause. When he stopped living at the site in 1998, the site became responsibility of NPS and currently serves as an interpretive exhibit to his legacy. The site was listed in the National Register of Historic Places in 2007 and was included in the *2022 Twin Lakes Cultural Landscape Inventory and Report* for its contribution to 20th century European American cabin settlements in the area.

The following sections are excerpts taken from the 2022 Twin Lakes Cultural Landscape Inventory and Report, unless otherwise noted.

Twin Lakes Region

Geological and ecological processes created the glacial lakes, mountains, and diverse habitat of the Twin Lakes (Nilqidlen Vena) cultural landscape for which wilderness-dependent populations of fish and wildlife thrived and were vital to thousands of years of human use. Alaska Native people occupied the region for thousands of years prior to the arrival of European American cabin builders in the 20th century.

The Dena'ina [...] sustained the place now known as Lake Clark National Park and Preserve. The Dena'ina's heritage, way of life, and historical stewardship of all that is known today as Lake Clark (Qizhjeh Vena) is invaluable in understanding the place. Twin Lakes was first named Nilqidlen Vena by the Dena'ina, translated in English as "lakes that flow into one another." Dena'ina traditional beliefs and practices revolved around a deep respect for all life on earth.

The U.S. Government purchased the Alaska Territory from the Russian Government in 1867, and commercial extraction of natural resources expanded. During this time, inland Dena'ina engaged in increased fur trading, mining, and commercial fishing. Hunting, trapping, and fishing brought

European American newcomers to the region and created competing claims on lands and resources. The first documentation of European Americans at Twin Lakes occurred in 1926.

The arrival of charter airplanes and lodge services after World War II increased sport hunting activities throughout the region. The region attracted settlers seeking wilderness experiences—big game hunting, a self-reliant existence, and solitude. European American cabin builders built residences in pursuit of a frontier lifestyle. Cabins were built close to the shoreline of Upper and Lower Twin Lakes. Cabin development was compact with small outbuildings (e.g., caches, woodsheds, and outhouses) and narrow natural surface trails to cabins and natural features.

Spike and Hope Carrithers

Gale "Spike" Carrithers, a retired Naval officer, and his wife Hope from Kodiak filed applications with the U.S. Bureau of Land Management for two five acre lots on February 9, 1960. The Carrithers built a cabin there between 1961 and 1962 and later a second cabin. They invited their Kodiak friend, Dick Proenneke, to visit them in 1962. Another friend from Kodiak, Erhardt "Dick" Weisser, applied for a small tract lease in the area in December 1960. Weisser built a small log cabin on his site in 1967. Herbert Wright of Seattle, a friend of the Carrithers and Proenneke, filed for a small tract lease at Twin Lakes on the same day the Carrithers filed. Wright became ill with cancer. Before he died in 1967, he urged Proenneke to file for a lease and build a cabin on his site, something Proenneke decided to do.

Richard L. Proenneke

Richard Proenneke was born in Primrose, Iowa on May 4, 1916. After spending most of his life there, he and a friend traveled across the country by motorcycle. After returning from their trip, Proenneke decided to go west and join a friend from Primrose working on a ranch. He was trucking cattle in Oregon when Pearl Harbor was bombed. Proenneke joined the Navy. Working as a carpenter's mate in the Pacific campaign, he developed rheumatic fever and was hospitalized for six months. At the end of the war, he returned to Oregon, where he took courses in heavy equipment maintenance and repair. Later he moved to Kodiak where he worked as a diesel mechanic and heavy equipment operator. He retired in 1967 and moved to Twin Lakes.[1]

Richard L. Proenneke shared the Dena'ina ethic and value of the land. Proenneke, along with other post-World War II settlers, built cabins within the region area to experience solitude, challenge, and self-reliance in the wilderness. The book *One Man's Wilderness: An Alaskan Odyssey*, based on Proenneke's journals and edited by Sam Keith, chronicled Proenneke's first year on Upper Twin Lake in 1967-68.

The book was published in the midst of a land debate that pitted conservationists against developers over the disposition of more than 100 million acres of federal public lands. The book and Proenneke's appearance on *Alaska, The Closing Frontier* brought national interest to the study area and had a profound role in the establishment of Lake Clark National Park and Preserve.

Lake Clark National Park and Preserve

In the 1970s Richard Proenneke and others advocated for the worthiness of the greater Lake Clark region as a national park. President Jimmy Carter invoked the Antiquities Act in 1978 and established Lake Clark National Monument. The same year the Public Broadcasting System (PBS) aired *Alaska, The Closing Frontier*. The film established Proenneke as an unofficial spokesman for the preservation movement and brought national attention to Lake Clark National Monument.

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1 *This paragraph was taken from the 2007 Richard L. Proenneke Site National Register Nomination Form.*

The Alaska National Interest Lands Conservation Act (ANILCA) established Lake Clark National Park and Preserve in 1980. The act mandated the preservation of natural features and scenic beauty of the area. The act also provided for continued use of the lands by Alaska Native people and other rural residents who traditionally used the land for subsistence purposes prior to establishment of the park and preserve.

PERIOD OF SIGNIFICANCE

The period of significance for the Richard L. Proenneke Site per the 2016 National Register Supplementary Listing Record is 1967-1979 for Proenneke's involvement in land conservation. This time period remains appropriate and no change is recommended.



Image 6: Spike's Cabin ca. 1990, NPS Karamanski collection.

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1.02 Chronology of Development & Use



Image 7: Proenneke building his cabin. Image from Sam Keith's biography, "One Man's Wilderness."

SITE DEVELOPMENT AND USE

This section of the Historic Structure Report summarizes the physical construction, modification, and use of the Richard L. Proenneke Site. Information was consolidated from previous repair documentation provided by NPS, the 2007 National Register nomination, the 2022 Cultural Landscape Report, and Proenneke's journals.

Site Development

In March of 1967, Richard Proenneke inquired with the Bureau of Land Management (BLM) whether the land at present day Lake Clark National Park and Preserve was open for entry. He was informed that it was, so in July of 1967, he moved into his friends Hope and Spike Carrithers' guest cabin on Upper Twin Lake and began felling trees approximately 300 yards south of the existing site. He peeled and stored the logs from the felled trees for future use in a log cabin. In October of 1967, Proenneke learned that the BLM land at Lake Clark was no longer open for entry.[1] However, in late May of 1968, he returned to the Lake Clark site and began construction of his cabin. By mid June, Proenneke had constructed the walls of his cabin and was installing roof poles to support a sod roof. "Twenty days to get the cabin to its present stage of construction," he wrote on June 18, when the cabin was ready to receive its sod roof.[2] Awaiting delivery of the polyethylene sheet necessary for building the sod roof at the cabin, Proenneke turned his attention to constructing a combined woodshed and outhouse building.

In early July, Proenneke began clearing the woodshed site. By mid July, Proenneke had built the walls and roof structure of the woodshed and built and installed an outhouse toilet inside the structure.[3]

Still awaiting the roof material, Proenneke built a stove stand and the Dutch door for his cabin in late July. Proenneke temporarily borrowed a small stove from his friends Hope and Spike Carrithers' guest cabin and installed it at his new cabin. By the end of July, just two months after beginning construction at the site, Proenneke was able to move into his cabin despite the roof being incomplete. "Tomorrow is the big day," wrote Proenneke on July 31. "I will load all my stuff remaining in the main cabin in the canoe and paddle down to my new home."[4]

When Proenneke's friend Babe Alsworth finally arrived by plane on August 2 with the material required for Proenneke's sod roofs, Proenneke

rushed to complete his roofs in three days. Because the stove he ordered had not arrived yet, Proenneke arranged with Hope and Spike Carrithers that he would keep their stove and the Carrithers would take the new stove for their cabin when it arrived.[5]

Proenneke's cabin was initially constructed without the masonry fireplace. Proenneke designed the fireplace in August 1968 and began construction on September 9. By September 21, the fireplace was complete and passed Proenneke's draft tests. He installed a damper and mantle the following month.[6] As the cold weather arrived in mid October, Proenneke had his first fire in the new fireplace.[7]

Proenneke began clearing for his cache in November of 1968. As he had done for the cabin and woodshed, he peeled the logs and left them to dry before building with them.[8] In April of 1969, he began shoveling the ground at the cache site to encourage it to thaw so that he could begin construction.[9] On May 7, he began digging post holes for the cache, and by May 25, he had completed building the cache.[10]

At the time of construction, Proenneke's cabin was built on BLM land that was not open for entry.[11] Proenneke's structures were technically classified as an illegal campsite. Proenneke learned in 1971 that a Native allotment land claim had been filed for the 5 acres that contained his cabin site.[12] The claim was filed by Mary Alsworth, a friend of Proenneke's. Proenneke learned later that Alsworth had filed the Native allotment claim to enable Proenneke to continue living on the site. The Native allotment claim was initially rejected in 1975, then reinstated in 1981, and finally ruled invalid in 1988 because the land had not been open for entry at the time she filed the claim.[13] Lake Clark National Park and Preserve was established in 1980, now placing Proenneke's cabin site on National Park Service land.[14] Proenneke filed for a special use permit from NPS to continue living at his cabin. He was granted his first 5-year special use permit in 1989, renewing until he left in 1998.[15] From the time he returned to Lake Clark in 1968 until he ceased living at the cabin in 1998, the cabin was Proenneke's full-time residence.[16]

Proenneke performed regular maintenance on his cabin while he lived there, including patching roof moss with new moss when required, patching minor roof leaks, maintaining the trails, site, and cabin floor with gravel, and cleaning and maintaining the paint on his wood stove. Some of Proenneke's more significant repair and modification projects included replacing the waterproofing layer on the lake side of the cabin roof with roll roofing in 1975,[17] adding indoor-outdoor carpet to his cabin in 1979[18] (after considerable internal debate of comfort versus maintenance),[19] replacing three of the original Dutch door hinge pins and bushings over time,[20] reworking of the wood stove piping and grate in 1987 to provide more heat to the cabin,[21] and fashioning a green tarp as a protective roof covering in the 1990s. At the end of the season in 1998, ranger Lee Fink helped Proenneke shore up the legs of his cache by securing steel supports to the existing wooden legs with bolts and heavy wire.[22] Soon afterwards, Proenneke left his cabin site on September 22, 1998 due to failing health.[23]

In the years since Proenneke's departure from the cabin, it was Proenneke's verbal request for NPS staff and volunteers to maintain the site and buildings as they saw fit. The most notable preservation effort happened between 2000-2004 and included roof replacements at all buildings and exterior log repair and replacement.[24] Smaller subsequent repairs include replacement of the dutch door hinge pins/ bushings in 2012 and the addition of a "bear door" shutter to protect the dutch door in 2013,[25] followed by another roof replacement at the cabin and woodshed in 2017.[26]

SITE CHRONOLOGY

The following summarizes major milestones in the development of the Richard L. Proenneke Site and any alterations to the structures. Information was consolidated from previous repair documentation provided by NPS, the 2007 National Register nomination, the 2022 Cultural Landscape Report, and Proenneke's journals.

Year	Action
1967	Logs cut/peeled for Proenneke's cabin
5/1968	Construction begins on Proenneke's cabin
7/1968	Dutch door at cabin completed
8/1968	Initial construction of Proenneke's cabin completed, including installation of existing wood stove from Spike's cabin
8/1968	Woodshed construction completed
9/1968	Fireplace added to Proenneke's cabin
10/1968	Damper and mantle installed at fireplace in Proenneke's cabin
5/1969	Cache completed
1972	Native allotment claim filed for Proenneke site by Mary Alsworth
1975	Lake side of Proenneke's cabin roof re-papered with granite roll roofing
1975	Mary Alsworth's Native allotment claim is rejected by the BLM
1978	Lake Clark National Monument established
1979	Indoor-outdoor carpet added to Proenneke's cabin
1980	Lake Clark National Park and Preserve established by the passage of ANILCA
1980	Proenneke's cabin: One hinge pin replacement at Dutch door (built from galvanized stove pipe scrap)
1981	Mary Alsworth's Native allotment claim is reinstated by the BLM after a change in regulations
1987	Proenneke's cabin: New stove chimney cap, chimney pipe replaced, stove grate modified to provide more heat to cabin
1987	Cache: New layer of moss installed on top of old
1988	Proenneke's cabin: Stove pipe rebuilt
1988	Mary Alsworth's Native allotment claim is ruled invalid because the land was not open to entry when she filed it
1989	Proenneke is granted a 5 year special use permit from NPS to live at his cabin
1996	Proenneke's cabin: Stovepipe replaced, cabin door frame planed for tighter seal
9/1998	Cache: legs stabilized with steel supports
9/1998	Proenneke stops living at the site
1999	Proenneke's cabin: Moist/moldy carpet removed
2000	Proenneke's Cabin: • Roof sod replaced sourced from Emerson Creek, rubber underlayment added, rafters and fascia half log replaced • Copper caps added at eave log ends • Stove chimney flashing replaced • Copper flashing added over existing flashing at stone chimney • Walls cleaned, chinking replaced
	Woodshed: • Roof sod replaced, rubber underlayment added, gas can flashings added at eave logs, purlins, and ridge log • Repairs to support poles at ground level
	Cache: Stabilizing wires moved below flashings
	Site: Gravel added to cabin/woodshed trails
2001	Proenneke's Cabin: Interior cleaned with trisodium phosphate (TSP)
	Cache: Roof sod replaced (recycled from Spike's Cabin), rubber underlayment added, rafters and fascia half log replaced
2002	Cache: • Legs replaced, copper/borate sleeves added • New layer of sod added to roof • Copper drip edge extension added

2003	Proenneke's Cabin: • Sill logs replaced, copper/borate sleeves added to ends, borate rods installed • Concrete block footings built/installed • Copper drip edge extension added • Front door hinge pins waxed • Two bear break-ins result in large picture window mylar being replaced with glass, and exterior muntins replaced with a steel grille • East window mylar replaced with glass
2003	Woodshed: • Copper drip edge extension added • New layer of sod at roof perimeter
2003	Cache: • Hinge pins waxed (2003)
2003	Proenneke dies on April 20 of a stroke, leaving his cabin site and its contents to the NPS
2004	Proenneke's Cabin: • Flashings tarnished with sulfuric acid • Wood stove restoration • Borate rods installed in sill logs, ridge pole, purlins, and eave logs
	Woodshed: • Sill logs and vertical half log posts replaced, copper flashings installed at new sill logs • Flashings tarnished with sulfuric acid • Borate rods installed in sill logs, ridge pole, purlins, and eave logs
2004	Cache: • Flashings tarnished with sulfuric acid • Borate rods installed in leg bases, ridge pole, purlins, and eave logs
2006	Proenneke's Cabin: • Flagpole replaced with reproduction made in 2004 due to bear damage
2008	Site: Fencing/parachute cord added to trails but removed for retaining site integrity
2012	Proenneke's Cabin: Front door hinge pins and bushings rebuilt
2013	Proenneke's Cabin: Bear door added
2014	Proenneke's Cabin: • Modifications to bear door • Rust repaired at wood stove
2015	Proenneke's Cabin: • Sheet metal added to base of bear door • Wood slot installed in ground at entry to support bear door • Stove pipe replaced • Logs harvested for new pole net structure, installed in 2017
	Site: • Sticks placed to denote path edges
2016	Proenneke's Cabin: • Chinking replaced • Metal sleeve installed over wood stove chimney smoke outlets to prevent water infiltration
2017	Proenneke's Cabin: • Roof replaced: Rafters repaired, felt paper replaced, new pressure treated plywood layer added, new ice and water shield added, new ethylene propylene diene monomer (EPDM) layer, new copper drip edge, new flashing at stone chimney, new (from Emerson Creek) and recycled sod installed, new pole net • Foam gaskets added at west windows • Interior surfaces wiped with thyme oil to inhibit mold growth
	Woodshed: • Roof replaced: Felt paper, plywood, ice and water shield, salvaged EPDM layer from cabin, newly harvested sod, new pole net • Copper purlin caps added
2018	Woodshed: • Fractured outhouse door top glued, with stump placed as a door stop • Copper purlin caps added
2021	Proenneke's Cabin: • Cyclical thyme oil treatment of logs begins to prevent mold growth
2022	Proenneke's Cabin: • Tarp added to north side of roof as temporary stabilization • Large west window cleaned

HISTORY OF USE

People have been living at the Lake Clark-Twin Lakes region, location of the Proenneke Site, for over 9000 years. The region is the traditional home of the Dena'ina, who inhabited the region for 1,000 to 2,000 years before the arrival of European American settlers.[27] European Americans began visiting the area in the early 1930s for hunting, trapping, and recreation. Proenneke began construction of his cabin in the 1960s.[28] Proenneke used the site as his full-time residence from 1968, when he constructed his cabin, to 1998, when he stopped living at the site.[29] While restoration work was ongoing at the site in the early 2000s, NPS volunteers began staying in the nearby cabins to assist with site interpretation for visitors.[30] When Proenneke died in 2003, he left the site, buildings, and their contents to NPS by verbal request.[31]

The Proenneke Site is presently an NPS exhibit that interprets the life of Dick Proenneke. The visitor season is June-through September, relying on seasonally favorable weather for access. The site is staffed by NPS interpretive rangers with established visiting hours between 9am-5pm. Visitors are allowed to wander freely. Camping is not allowed within the National Register designated boundary and is available across Hope Creek in a designated area.

NPS interpretive rangers reside on site during the season to unlock buildings, greet visitors, and monitor exhibit items. The rangers live in Hope's and Spike's cabins and are expected to greet all visitors during visiting hours.

INTEGRITY

As defined by the National Register of Historic Places, seven aspects comprise the evaluation of a resource's integrity. These include integrity of location, setting, design, material, workmanship, feeling, and associations. The Richard L. Proenneke Site ranks as follows:

- Location - High - The buildings remain in their original locations.
- Design - High - The exteriors, building forms, and interiors remain intact.
- Setting - High - The surrounding natural and cultural landscape has not been significantly altered since the period of significance.
- Materials - Medium - Most original materials at the building remain intact or have been replaced in kind at end of life. Minor alterations have been made to increase security and building performance, including concrete footings, copper sill flashings, glass replacement windows, and a steel bear protection grille at Proenneke's cabin, and the addition of protective flashings at several exposed log ends.
- Workmanship - High - The structures retain their original rustic, handmade character.
- Feeling - Medium - Increased visitation during the summer season has somewhat reduced the feeling of natural seclusion that was present during the period of significance.
- Association - High - The buildings maintain visual continuity with the surrounding site. Although use of the site has shifted from a private residence to a park exhibit, the site continues to interpret Proenneke's life.

The Richard L. Proenneke Site retains a high degree of integrity despite its change of use from full-time residence to interpretive exhibit. Some alteration of materials and alterations to details to improve long-term preservation has occurred in the restoration efforts, but the primary character defining features including the exterior wall construction of the structures and the handmade Dutch door at the cabin remain intact. The greatest threat to the property's integrity is the change in the property's feeling due to the recent increase in visitation during the summer season. The feeling of seclusion in nature is why Dick Proenneke established his home there and is why so many people visit. The intensity of visitation diminishes the very solitude that both Proenneke and present-day visitors seek.

ENDNOTES

1 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site* (Port Alsworth, AK: Lake Clark National Park and Preserve, 2007), 13.

2 Richard Proenneke, *Journals of Richard Proenneke 1967-1996* (Document provided by NPS), June 18, 1968.

3 Ibid., July, 1968.

4 Ibid., July 31, 1968.

5 Ibid., August 2, 1968.

6 Ibid., August - October, 1968.

7 Ibid., October 16, 1968.

8 Ibid., November 17-27, 1968.

9 Ibid., April 7, 1969.

10 Ibid., May 7-25, 1969.

11 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 13

12 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, September 24, 1971.

13 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 14.

14 Tina Bishop et al., *Twin Lakes (Nilqidlen Vena) Cultural Landscape Inventory and Cultural Landscape Report*, (Port Alsworth, AK: Lake Clark National Park and Preserve, 2022), 43.

15 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 14.

16 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 4.

17 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, June 12, 1975.

18 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, October 3, 1979

19 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, October 2, 1979

20 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, July 8, 1980

21 Richard Proenneke, *Journals of Richard Proenneke 1967-1996*, December 8, 1987

22 "Draft - SP-Proenneke Complex Preservation Plan II" (Document provided by NPS, 2001), 3.

23 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 18.

24 Kathryn Myers, "Chronology of work at the RLP cabin" (Anchorage, AK: NPS, Last updated July, 2022), 1

25 Ibid., 5-8.

26 Ibid., 7;; Monroe Robinson, "Tasks to be Addressed with Special Services Contract at the Proenneke Site in 2004" (NPS, 2004), 1

27 John B. Branson, *National Register of Historic Places nomination: Proenneke, Richard L., Site*, 12.

28 Ibid., 12.

29 Ibid., 11.

30 Tina Bishop et al., *Twin Lakes (Nilqidlen Vena) Cultural Landscape Inventory and Cultural Landscape Report,* 47.

31 Ibid., 47.

1.03 Physical Description



Image 8: Proenneke's beach as viewed from the south jetty, with his cabin visible on shore.

OVERVIEW

The following section details the physical description and conditions of the Richard L. Proenneke Site, beginning with the overall complex and site, followed by dedicated sections for each building. Each building section includes a physical description, identifies character-defining features of the building's exterior and interior, and documents current conditions.

Corresponding treatment recommendations and prioritization are identified in Part 2 - Treatment and Use.

CONDITION ASSESSMENT METHODOLOGY

An on-site inspection of the existing conditions and context was carried out by Hennebery Eddy Architects and the National Park Service on June 7-8, 2022. Conditions at the time of the survey were mild, with overcast skies and temperatures ranging around 65. Access was provided to the site, exterior, and interior of the buildings. Conditions were photo-documented and recorded on field assessment forms developed for this project. Moisture meters confirmed exterior log and masonry conditions.

The architectural team photo-documented and noted structural conditions on site. There were no major observations requiring a structural engineer. In addition, there are no present mechanical, electrical, and plumbing (MEP) systems for engineer review. Observations have been provided by the architectural team and with concurrence from NPS.

Unless noted otherwise, all photographs and drawings in this report have been provided by Hennebery Eddy Architects. Images by others are credited accordingly.

All condition observations were visible, no destructive investigation was performed. Moisture meters and probing awls were used to verify the extent of wood decay throughout. Wood Moisture Equivalent (WME) readings of 10% or less represent typical moisture levels for the area. A WME of greater than 17% provides an environment for rot. Readings greater than 20% indicate severe active rot.

Corresponding annotated elevation and plan diagrams indicating the location and approximate area of deficiencies are included at the end of each building section. The diagrams serve to illustrate a majority of the deficiencies but are not all inclusive nor do they fully capture site conditions. Please refer to condition narratives for a complete record of all observed conditions.

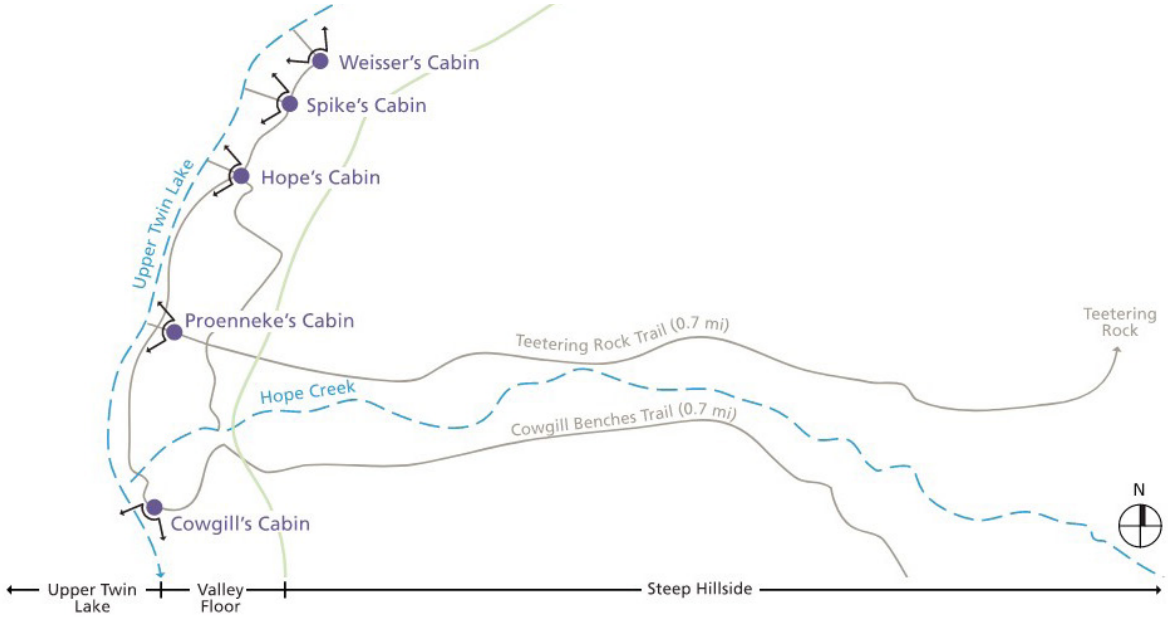


Image 9: Figure 3-9 from the 2022 Cultural Landscape Report depicting the Richard L. Proenneke Site and adjacent cabins. Important viewsheds from each cabin are identified by arrows.



Image 10: Proenneke's beach along Upper Twin Lake, with his bench and the north jetty in the foreground, and the trail eroding into the lake in the background.

GENERAL DESCRIPTION

The Richard L. Proenneke Site is located in the Twin Lakes region, a remote wilderness area within Lake Clark National Park and Preserve in Alaska without road access. The nearest town is Port Alsworth, approximately 30 miles southwest by air. Proenneke's cabin is nestled in spruce trees and tundra, set back along the southeast shore of upper Twin Lake near the mouth of Hope Creek.

The site was originally defined in the 2007 National Register nomination form,as less than one acre in size. It was expanded per the 2016 amendment to 7.2 acres. The boundary is defined to the north by Teetering Rock trail, the shore of upper Twin Lake to the west, Hope Creek to the south, and a series of Hope Creek levees to the east.

CHARACTER DEFINING FEATURES

Character-defining features (CDFs) are those architectural materials and elements that contribute to communicating the site and buildings' significance. The buildings at the Richard L. Proenneke Site are significant for their association with Proenneke's advocacy for Alaskan wilderness protection, and the documentation of his construction methods and life on Twin Lakes that supported this cause.

An overview of the CDFs on site are identified in the 2022 Cultural Landscape Report and depicted in the Proenneke Site Features Diagram at the end of this section. The CDFs of the site include:

- Network of trails for cache access and recreation
- Clearings surrounding each structure
- Viewsheds from the cabin towards the lake and surrounding mountains
- Underground cool box with sod access hatch
- Manicured lake front beach with rock jetties
- Beach front chair platform
- Hope Creek bridge abutments (bridge no longer extant)
- Three field caches
- Hope Creek outlet
- Five stone levees along Hope Creek

CONDITIONS

General Site

The Proenneke cabin is oriented north/south and looks over the lake to the west. The site includes two contributing outbuildings: a stilted cache to the south of the cabin and a woodshed and outhouse structure to the northeast. A public outcan behind Proenneke's cabin was installed in 2005, with a privacy wall added in 2006. Neither are contributing. The Richard L. Proenneke Site is accompanied by neighboring recreational cabins to the north including Hope's Cabin, Spike's Cabin, and Weisser's Cabin. All are outside of the site boundary.



Image 11: The public outcan and privacy wall.

A network of trails connect Proenneke's site to these cabins and also include hiking trails along Hope Creek and up to Teetering Rock, a natural feature on the mountainside to the east and a favorite viewpoint of Proenneke's. The trails leading from the beach and immediately adjacent to the cabin are topped with lake gravel, added between 2000-2004. Small branches lining fragile tundra have been placed to deter foot traffic beyond the designated paths. Trails extending beyond this immediate vicinity are well-travelled and have created deeply grooved paths settling below the tundra.



Image 12: Typical gravel trail surrounding the Proenneke Cabin with branches laid to protect adjacent tundra.

Conditions:

The trails and surrounding tundra are well maintained by park staff. A section of the lake trail to Hope Creek has eroded into the lake. Protection of the surrounding tundra remains a priority for NPS. The use of branches lining heavily-trafficked pathways to prevent overstepping on tundra appears to be a successful mitigation tactic with minimal impact to the historic site.

Ranger's Quarters

The neighboring three cabins are contributing resources to the cultural landscape, but are not



Image 13: Spike's Cabin serving as ranger's quarters for the summer season.

contributing to the historic Richard L. Proenneke Site. These cabins are used by NPS for administrative purposes. Hope's and Spike's cabins have been rehabilitated as seasonal rangers' quarters. Weisser's Cabin is used as a shop and storage building. All three buildings are accessible from the lake and are connected by the inland trail network.

Conditions:

While these cabins are outside of the site's boundaries, they are associated with Proenneke's early years in the Twin Lakes region and served as his accommodations while constructing his own cabin and for storage of his things during the decades which he lived on site. Given this fact, there is growing interest by the public to visit them. There are currently no restrictions in place for public access of these cabins. This generous flexibility extended to visitors has resulted in surprise visits and invasion of personal space for resident rangers at all hours of the day, as reported by NPS employees. The park is planning to provide "Private Residence" signage at cabin trails along the beach to deter visitors.

As the number of visitors per season grows, the need for more rangers is also of concern. Per conversations with NPS staff on site, NPS considered employing four rangers for the 2022 season but were limited in staffing availability.

Camping

A designated camping area - Hope Creek Campground - is provided on the south side of the creek. This requires campers to ford the creek in order to visit the Proenneke site. Overflow public camping was common at the Hope Creek delta but is now prohibited to avoid disturbance of site features near the creek. Camping by park staff and contractors is allowed surrounding Spike's, Hope's, and the Weisser Cabins.



Image 14: Inland trail connecting the Woodshed (pictured) to the neighboring cabins.



Image 15: Contractor camping adjacent to the Weisser Cabin.

Conditions:

Conditions of the campground were not assessed as part of this report. However, the continued use of Hope Creek Campground appears to be deterring disturbance to significant site features within the Richard L. Proenneke Site.

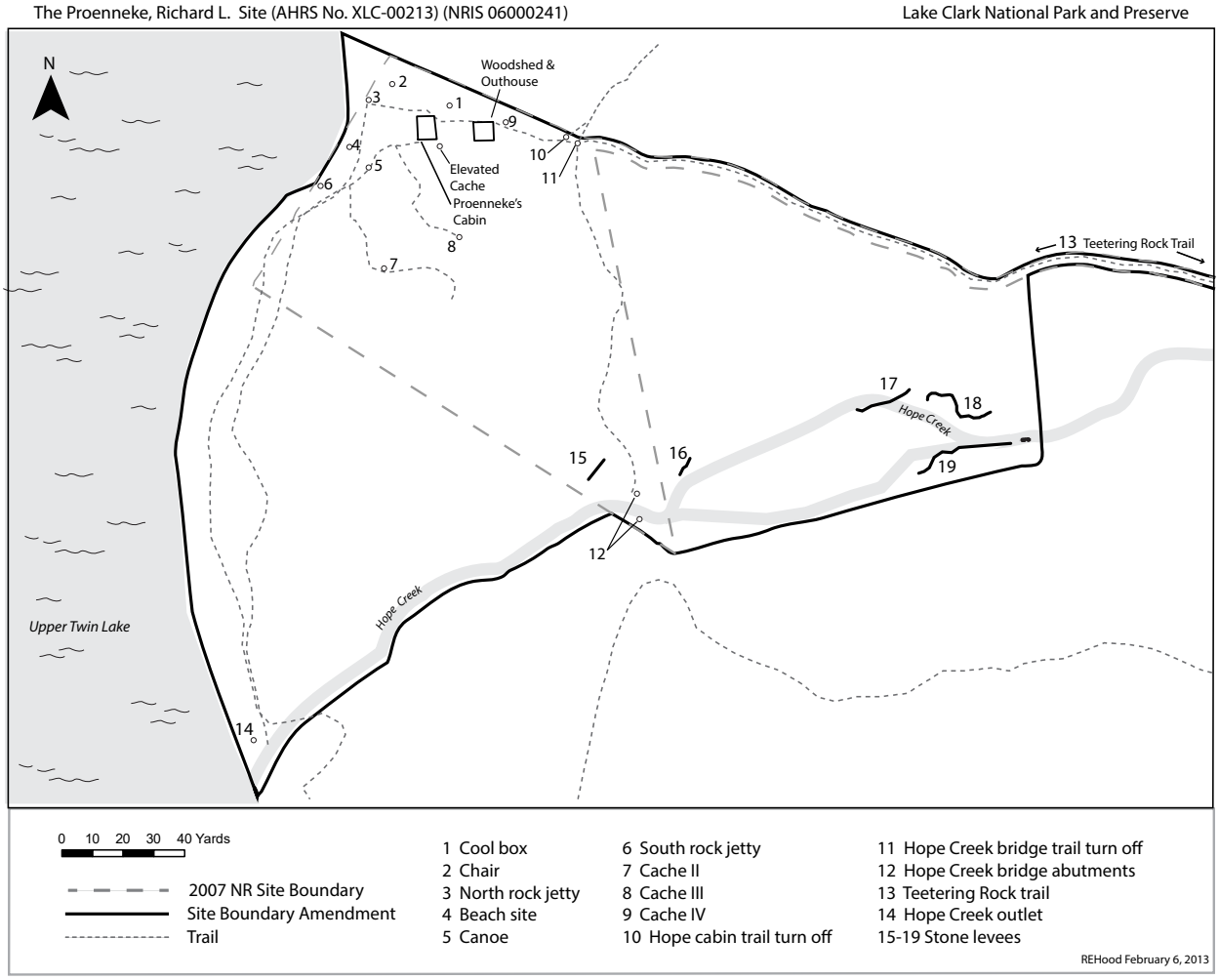


Image 16: Richard L. Proenneke Site map with contributing features identified, NPS.

Proenneke Site Features Diagram

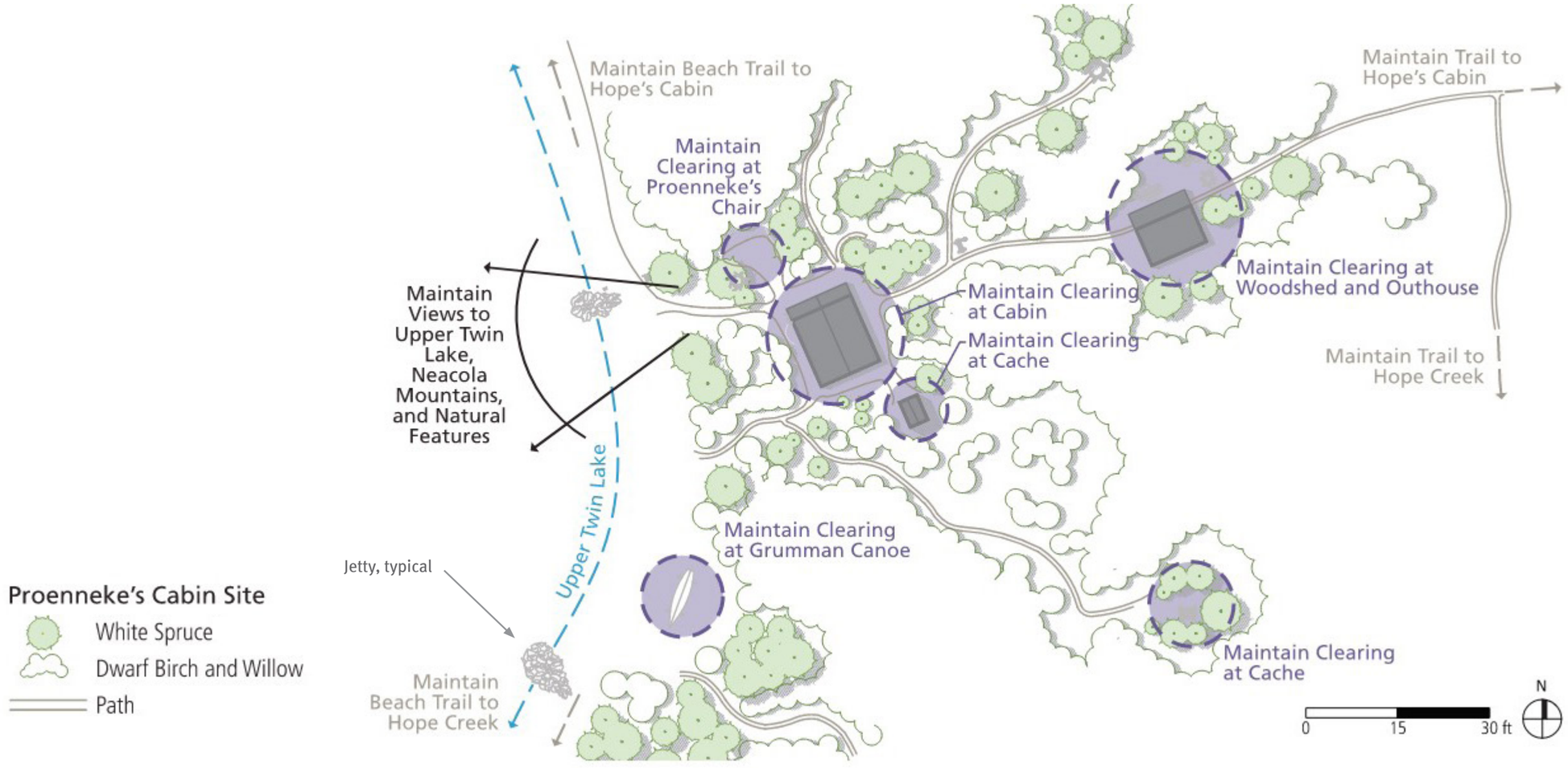


Image 17: Figure 4-7 from the 2022 Cultural Landscape Report depicting the Richard L. Proenneke Site and associated character defining features, with recommendations for preservation of significant landscape features, including trails and viewsheds..

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Image 18: The northwest corner of Proenneke's Cabin, with the cache visible in the background.

GENERAL DESCRIPTION

Proenneke's Cabin was constructed in 1968 and is a one-story log cabin with gable roof. It is rectangular in plan at approximately 12' x 16' and constructed of peeled, round spruce logs with saddle notching. The roof is made of spruce poles covered by sod and moss collected nearby. The sod roofing assembly was replaced in 2000 and again in 2017 by NPS. The entrance is at the north gable end and is protected by a projecting roof. A river rock fireplace and chimney is centrally located within the south gable end. A wood stove chimney pipe penetrates the roof at the east elevation near the ridge line. Wood windows provide natural light along the east and west elevations.

The interior is a simple open room with a gravel floor, exposed log walls, and exposed roof structure above. The fireplace hearth is a focal point at the south elevation. Interior furnishings are staged to represent how Dick Proenneke lived in the cabin, with a wood stove and cooking area near the entry, his bunk bed tucked in the southeast corner, and his desk, work table, and storage shelves lining the west elevation.

CHARACTER DEFINING FEATURES

Character-defining features, the architectural materials and features that communicate the building's association with Dick Proenneke and his advocacy efforts, include:

- Rectangular plan
- Gabled roof with moss/sod roof covering
- Spruce retaining "pole net" supporting sod roof
- Spruce log construction with saddle notching
- Wood sash windows
- Wood dutch door with handmade wood hinges and locking mechanism
- Single room volume
- Exposed structure as interior finishes
- Gravel floor
- River stone fireplace and chimney
- Wood fire stove
- Spruce flag pole

EXTERIOR CONDITIONS

Roof

The original roof structure consists of spruce purlins supporting spruce pole rafters, topped with felt, sod, and a spruce "pole net" structure to prevent sloughing over the eaves. The roof covering above Proenneke's original felt underlayment was first replaced by NPS in 2000 with a second layer of new 30# felt, an EPDM rubber membrane, sod from Emerson Creek, and a replica of the original spruce pole net. Also replaced were two rafters at each gable end and the half-round fascia on each eave. The projecting ends of the rafters and purlins were capped with copper flashing. Borate rods were installed at purlins in 2004. The roof covering above the rafters was again replaced in 2017 and now includes a 15# felt underlayment, new 1/2" treated plywood sheathing topped with ice and water shield and wrapped in an EPDM rubber membrane, and trimmed with copper edge flashing. The existing half-round log fascia was repaired. The majority of sod was salvaged and reinstalled, supplement by sod removed from the wood shed, with the remaining 30% of it replaced and sourced from Emerson Creek. The spruce pole net was also replaced in 2017. Seasonal rangers continue to water the roof during summer months to keep the sod alive.



Image 19: Roof layers include purlins, rafters, roof felt, plywood sheathing, ice and water shield, wrapped in a rubber membrane and trimmed with copper flashing, sod, and topped with the "pole net" structure.



Image 20: Purlin ends are capped with copper flashing and treated with borate rods, projecting just below the flashing.

Conditions:

Projecting spruce purlins are weathered with select areas of rot at their ends and under copper flashing caps. Borate rods are plugged with custom wood plugs, which are migrating out of the logs. There is evidence of boring insect damage at the ridge beam on the north elevation. No active insects were observed and this is not of structural concern. The 2018 condition assessment recorded sagging ridge pole and purlins, which was not observed on site during this assessment. All structure appeared sound.

The roof around the fireplace chimney is in poor condition. Copper flashing is lapped incorrectly with unsealed nail penetrations and failed mastic and ice



Image 21: Overview of typical weathering and black residue at the west elevation.

and water shield patches, allowing water to infiltrate the roof layers below. Active leaks are visible on the interior, and tar paper is exhibiting white mold. Copper flashing elsewhere is in good condition and the pole net structure is weathered.

The sod roof covering above the structure is holding up well and is in good condition. According to conversations with NPS staff on site, a geotextile fabric was specified for the sod replacement but never installed. Regardless, no sloughing of the sod was observed.



Image 22: Copper flashing visible along the sill logs at the perimeter.

Exterior Walls

Exterior walls are constructed of peeled and round spruce logs harvested 300 yards from the site with saddle notching. Projecting log crowns are cut flush at each corner.

The sill logs were replaced in 2003 due to wood rot, with associated improvements to the foundation at the same time. The original sill logs were removed and the perimeter was excavated approximately 7” to install new concrete piers. New sill logs were placed on the piers with copper flashing tacked to their underside and extending to the base of the piers below, to prevent burrowing animals from accessing the interior of the cabin. The spaces between flashing were backfilled with earth. Borate rods were installed in 2004 approximately every foot along the perimeter sill logs. These are all plugged with wood.



Image 23: Typical non-structural checking at exterior logs.

The exterior has been re-chinked over time. Proenneke used various materials including oiled oakum, dry oakum, and dried moss. Natural oakum has been used to infill gaps on an as-needed basis. A previous dutchman patch was observed at the west elevation, which dates back to at least 1972 as visible in historic photographs.



Image 24: Typical bear damage at exterior logs.

Nails and other fasteners project from the exterior log walls throughout the building, for which Proenneke hung his gear and other belongings. Some are now in use for seasonal display of artifacts.

Conditions:

Logs are weathered at the east and west elevations. An unknown black residue is spreading at the west and south elevations. Log checking is typical throughout and not of structural concern. Gaps in chinking were visible and are seasonally infilled by park staff. Borate rod wood plugs are migrating out of their holes. Two borate rods, plugs, and surrounding wood at the south elevation sill logs have been eaten by animals, most likely porcupines. There is minor surface rot at the sill logs adjacent to the copper flashing at the south elevation. Bear claw scratches mar the logs at the south elevation and above the door on the north elevation.



Image 25: The large west elevation window with faux metal muntins.

Exterior Windows

The cabin has three wood windows hand made by Proenneke: two at the west elevation and one at the east elevation. The smaller west elevation window is a fixed full lite unit that is 23" x 14". The larger west elevation window is a 9-lite simulated divided lite window that is 26" x 30". The east elevation window is a wood frame outswing hopper unit that is 26" x 15". All three operated during Proenneke's duration on site.



Image 26: Detail of typical exterior wood window, with Proenneke's tooling marks visible.

In 2002, a black bear broke through the larger west elevation window and destroyed Proenneke's original wood muntins and mylar pane. A replica of the muntions were constructed and new mylar installed. A second black bear broke in again later that summer, and with repairs to the window made yet again. In 2003, the mylar was replaced with glass and the outermost wood muntins were replaced with a welded steel muntin security grille. The east elevation window mylar was replaced with glass as well. Strips of closed-cell foam were added to both west elevation windows to prevent moisture infiltration in 2017.



Image 27: The famous wood dutch door with hand carved hinges and hardware.

Conditions:

All windows are in good condition. The larger west elevation window no longer has glass panes within each divided lite. Debris fills the gap between the glass storm pane and sash, cleaned in 2022 of insects. The exterior metal security grill is not original.

Exterior Door

The entrance door on the north elevation was hand made by Proenneke and is a solid wood dutch door with wood carved hinges and lock. The hinge pins and bushings were reconstructed in 2012. The hinge pins and bushings were waxed using bar soap by Proenneke as recorded in his journals. This is a known attractant to porcupines and other animals.

A "bear door" was added in 2013, prompted by a bear break-in during the offseason. This "door" is a protective shutter installed at the exterior and covers the door and threshold. The bear door has a metal frame with a sheet metal bottom panel and plywood upper panel. The lower metal panel slides into a wood slot set into the ground outside of the main entrance. Two metal rods extend to the roof and are friction-fit between the rafter poles to hold the bear door in place. This door remains installed through the offseason. During the visitng season, it is installed at the end of each day and removed every morning. A door latch cover was added in 2014 to protect the latch mechanism when the bear door is removed.

Conditions:

The wood dutch door has evidence of recent animal damage along the exterior threshold and at the lower wood strap hinge. The door threshold has typical abraded wear and tear. The wood strike in the wood door frame is cracked. Both hinges are in working condition, with the top hinge cracked as first recorded in 2018 with no progression. The wood lock and handle are fragile and have been previously repaired with epoxy. Current practice is to refrain from using the lock and handle and keep it protected with the latch cover.



Image 28: The existing protective bear door in place, disguising the original door beneath.



Image 29: Detail of recent animal damage at the exterior door and frame.



Image 30: A vertical crack extends through the mortar joints of the masonry chimney.

The bear door is not an original feature but a necessary measure to prevent animal damage to the original dutch door - a key character defining feature of the cabin. The bear door, in its current design, detracts from the cabin's primary north elevation when installed and is heavy and cumbersome to handle on a daily basis by the seasonal rangers.

River Stone Chimney

A river stone fireplace is centered on the south elevation gable end. The chimney is capped with sheet metal and stone weights to hold it down. The chimney was flashed with old gas cans by Proenneke. This flashing was supplemented in 2000 with new copper flashing.

Conditions:

The chimney is settling away and to the south of the building, creating a 3/4" gap between the log walls and river stone. Adjacent roof eave heights were measured to confirm weather this settlement was impacting the building itself, with no major movement recorded.

A vertical crack in the mortar joints extends from the ground level to about 1/3 of the way up the chimney at the south elevation. This crack was recorded by Proenneke in 1969 and since observed by volunteers, with a note that the crack has been there for years and has not expanded.

Wood Stove Chimney

A metal chimney was fashioned by Proenneke using bean cans, which he replaced over the years. The current metal chimney was replaced by Western Sheet Metal in 2000 to match Proenneke's original design. The original bean can chimney cap was lost in the process, and a contemporary cap was installed. The chimney is insulated at the roofline with a thimble.

Conditions:

The wood stove chimney is in good condition, but the stove is not in use to prevent fires.

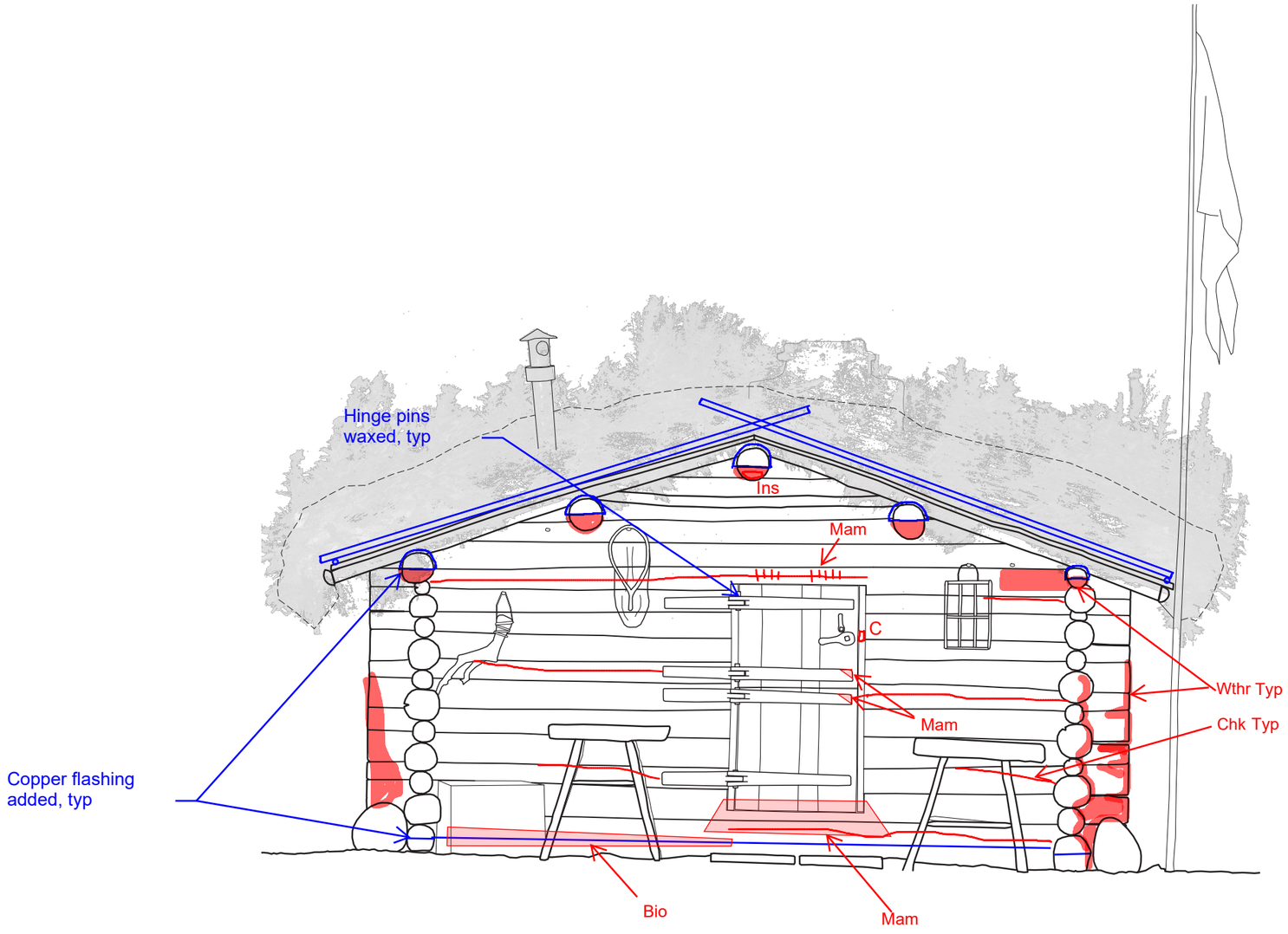


Image 31: Settlement of the chimney away from the building is evident via a gap produced between the masonry and log walls.



Image 32: The wood stove chimney projecting above the roofline.

Proenneke's Cabin
Exterior Condition Diagrams



CABIN NORTH ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

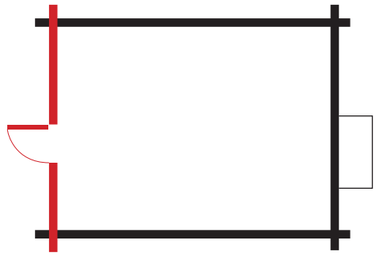
GENERAL CONDITIONS

None

CONDITION CODES

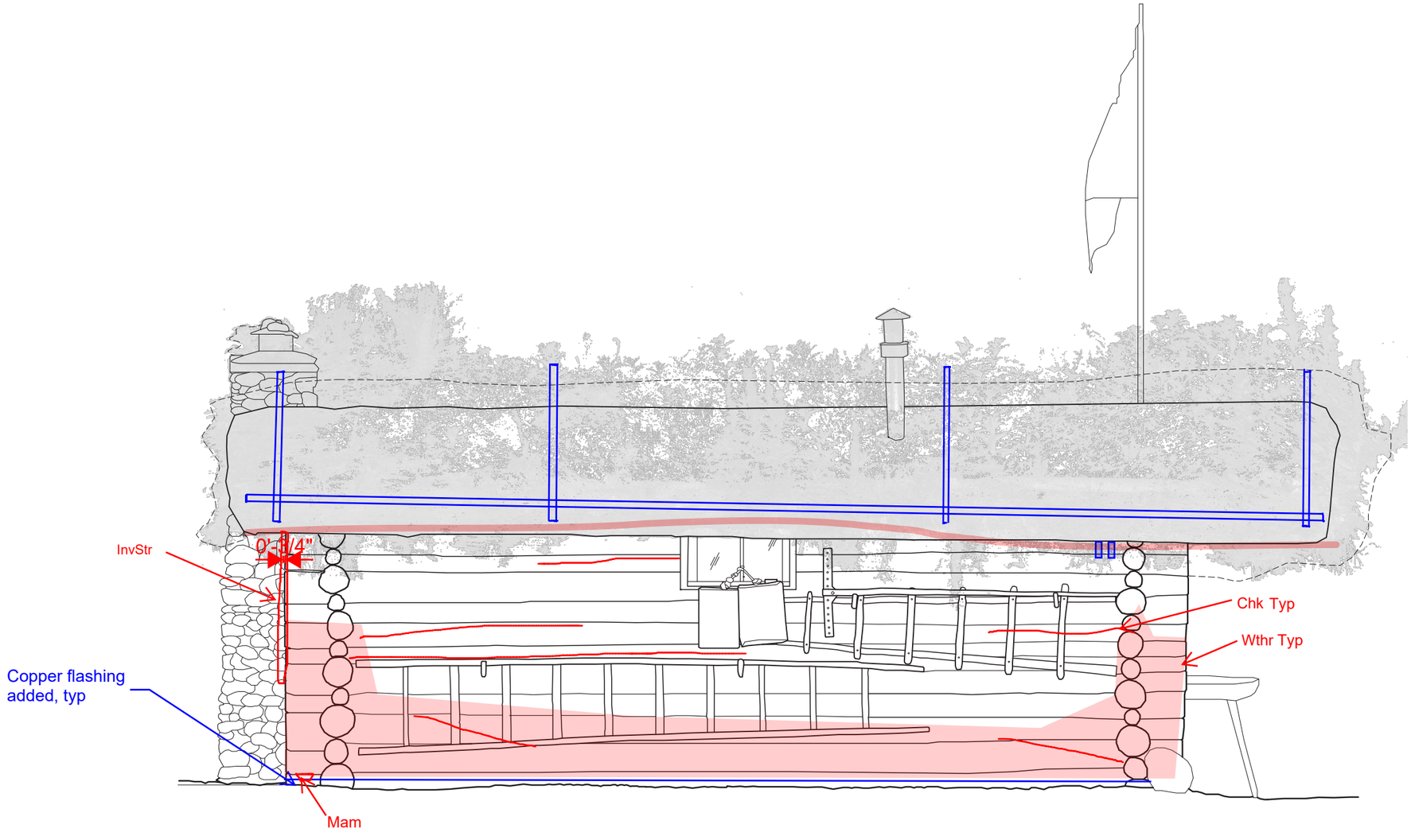
Bio	Soiling: Biological
Ins	Wood: Insect Damage
Mam	Wood: Mammal Damage
C	Crack: Single Unit
Wthr	Wood: Weathered
Chk	Wood: Checking
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Exterior Condition Diagrams



CABIN EAST ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

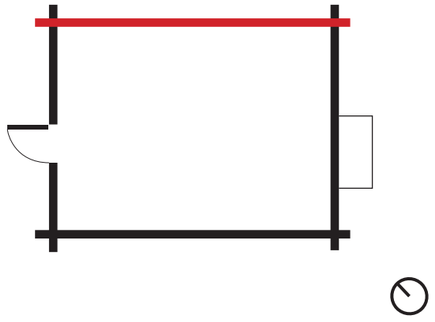
GENERAL CONDITIONS

Chinking deteriorated at all notches.

CONDITION CODES

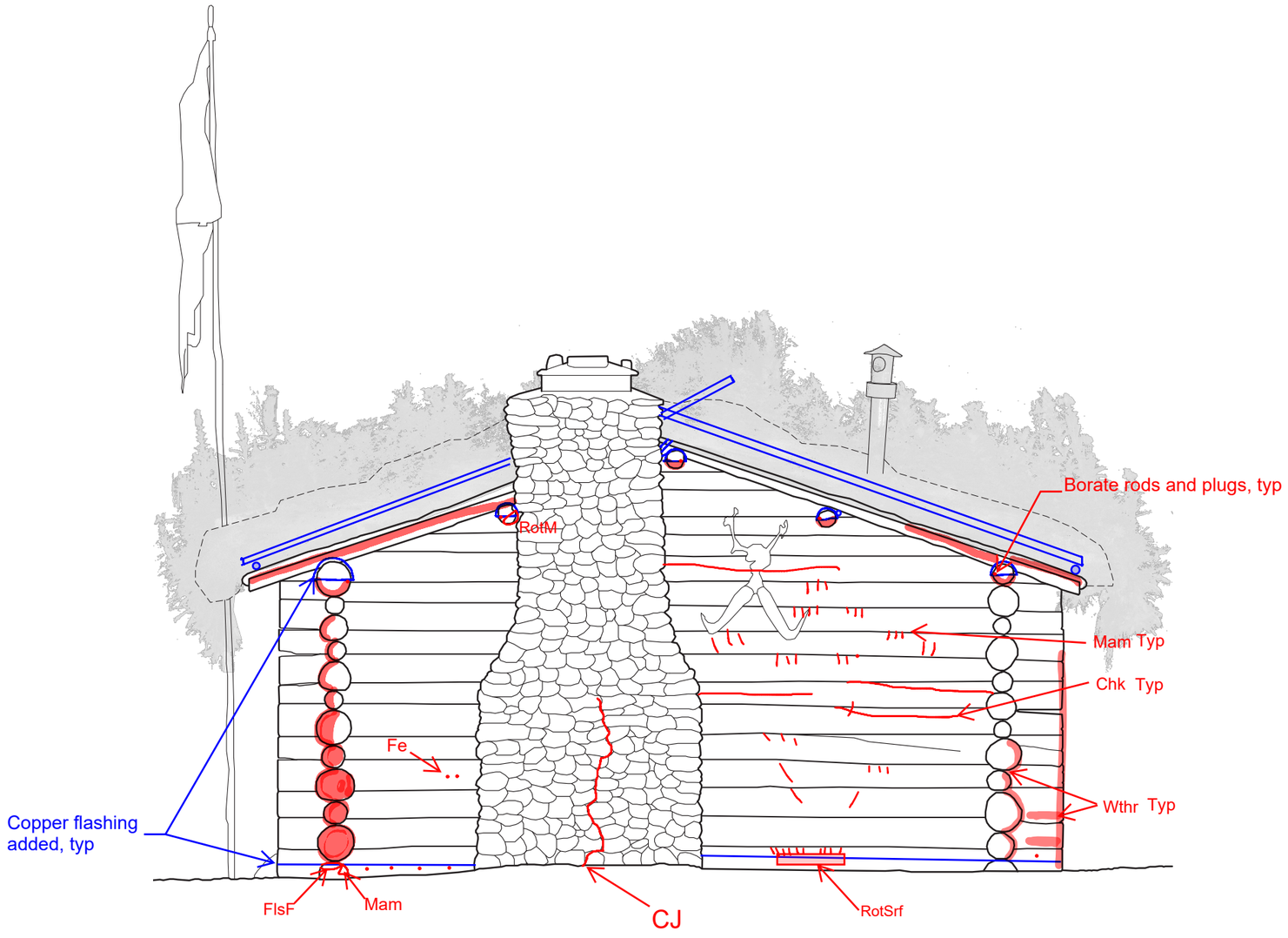
InvStr	Structural Investigation Required
Mam	Wood: Mammal Damage
Chk	Wood: Checking
Wthr	Wood: Weathered
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Exterior Condition Diagrams



CABIN SOUTH ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

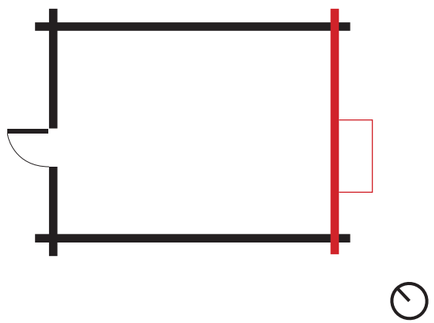
GENERAL CONDITIONS

Chinking deteriorated at all notches.

CONDITION CODES

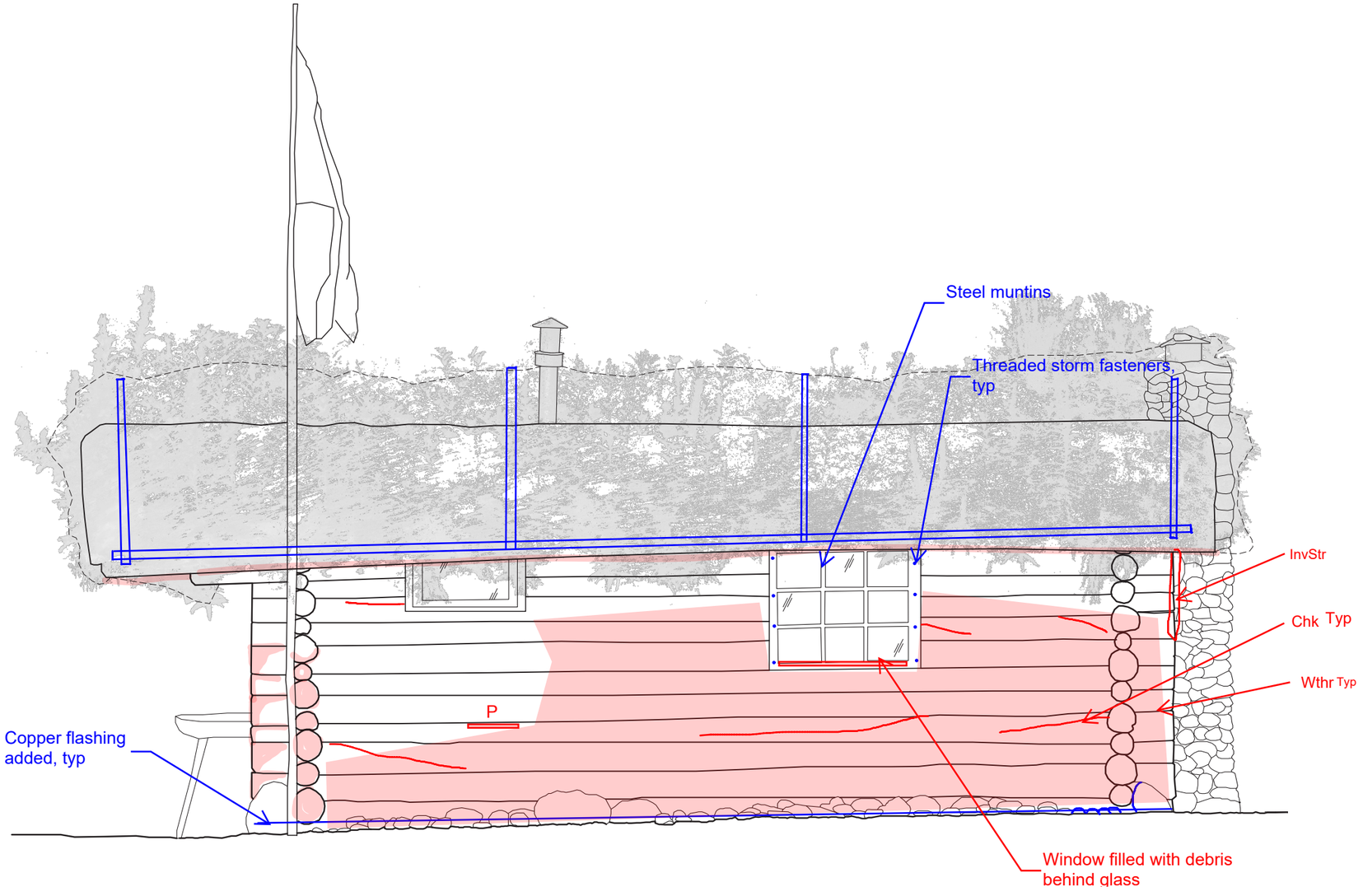
FlsF	Flashing: Failed
Mam	Wood: Mammal Damage
Fe	Embedment: Ferrous Element
RotM	Wood: Moderate Rot
CJ	Joints: Mortar Cracked
RotSrf	Wood: Surface Rot
Chk	Wood: Checking
Wthr	Wood: Weathered
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Exterior Condition Diagrams



CABIN WEST ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

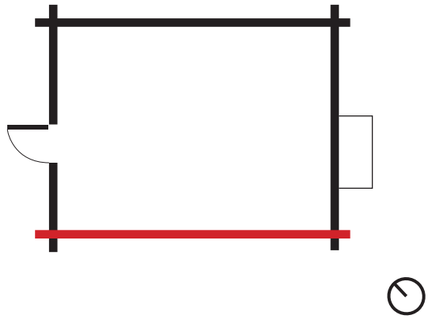
GENERAL CONDITIONS

Chinking deteriorated at all notches.

CONDITION CODES

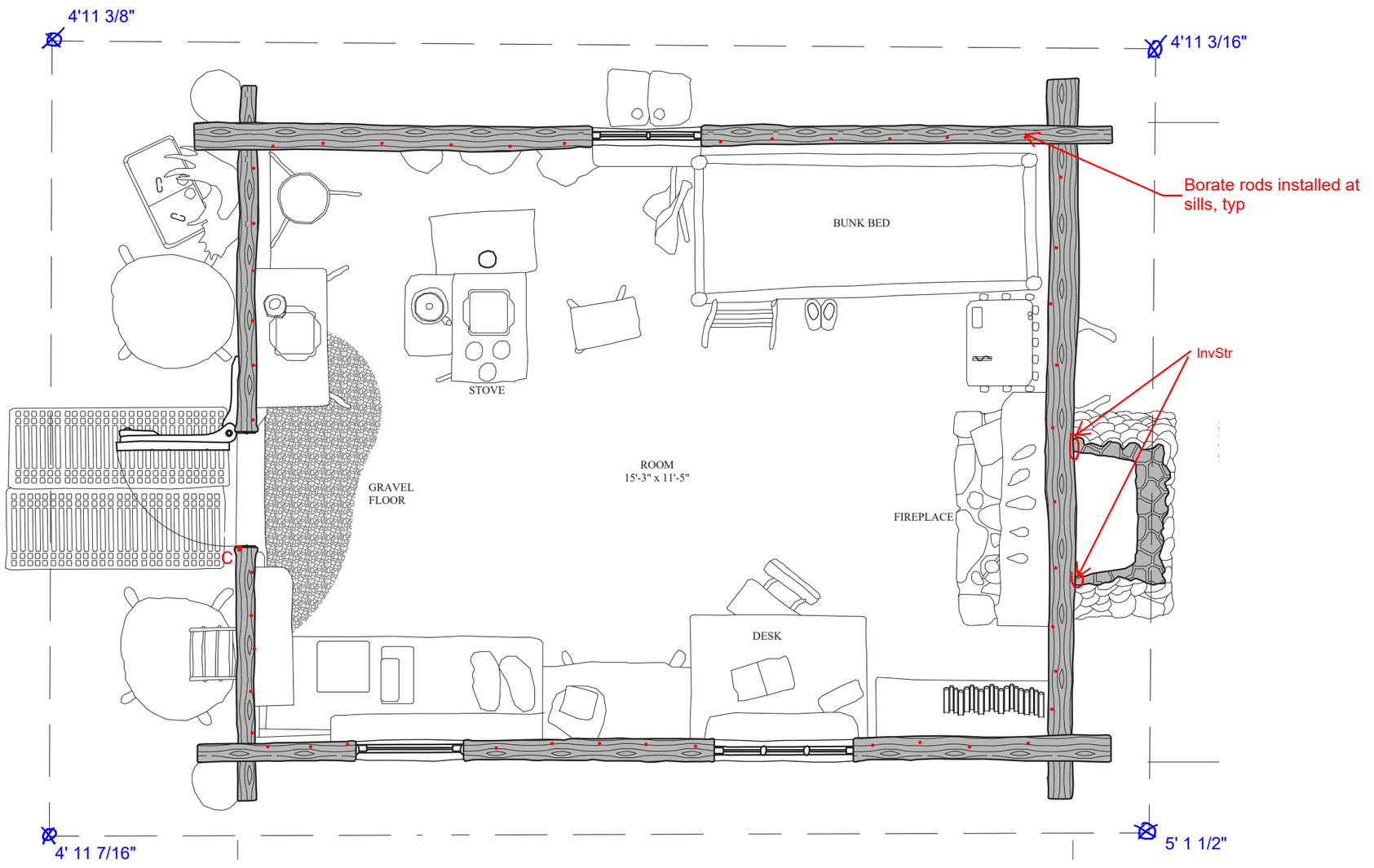
P	Repair: Patch Sound
InvStr	Structural Investigation Required
Chk	Wood: Checking
Wthr	Wood: Weathered
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Exterior Condition Diagrams



CABIN FLOOR PLAN

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

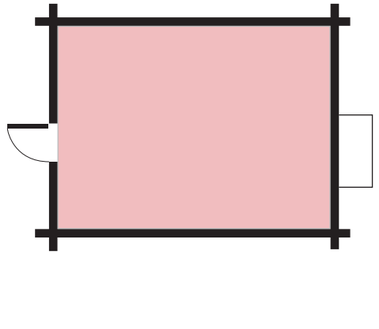
GENERAL CONDITIONS

None

CONDITION CODES

C	Crack: Single Unit
InvStr	Structural Investigation Required
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

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INTERIOR CONDITIONS

Interior Finishes

Finishes at the interior are minimal and include the exposed roof structure (log pole rafters and felt underlayment visible), exposed interior log walls, and beach gravel floor. Proenneke had an astroturf floor covering that was removed by NPS. A history of mold growth at the interior has been remedied by cleaning the interior using thyme oil, with ongoing monitoring by staff.

The interior is staged with Proenneke's items for exhibit purposes during the visitor season. These items were not included in this report, but their condition can be found in the *Collection Condition Survey, 2017-2018: Richard L. Proenneke Cabin Complex Upper Twin Lake, Alaska* NPS document.

Conditions:

Roof flashing failure surrounding the fireplace is causing mold at the exposed felt underlayment.

All other interior finishes were in good condition with no mold growth present. Areas of missing chinking in the log walls were observed. See Exterior Wall section for more information.

River Stone Fireplace

Proenneke built a wood-burning fireplace with river stones collected from Hope Creek. The fireplace did not heat the cabin well and was supplemented with a wood stove.

Conditions:

The firebox has high moisture levels (>16%WME) and efflorescence throughout.



Image 33: General interior view of the cabin with gravel floor and exposed log walls and roof structure above.



Image 34: Detail view of the roof structure with exposed felt underlayment.



Image 35: Moderate moisture levels read at 14.1% within the firebox, with active efflorescence visible as white powder on the surface.

Wood Stove

Proenneke installed a wood stove near the entry along the east side of the interior. The first stove installed is now located in Spike's Cabin. The current stove was installed in 1968. It is a foldable freestanding stove propped upon metal legs sitting directly on the gravel floor. This was refinished in 2014 by volunteers using wire brushes and repainted.

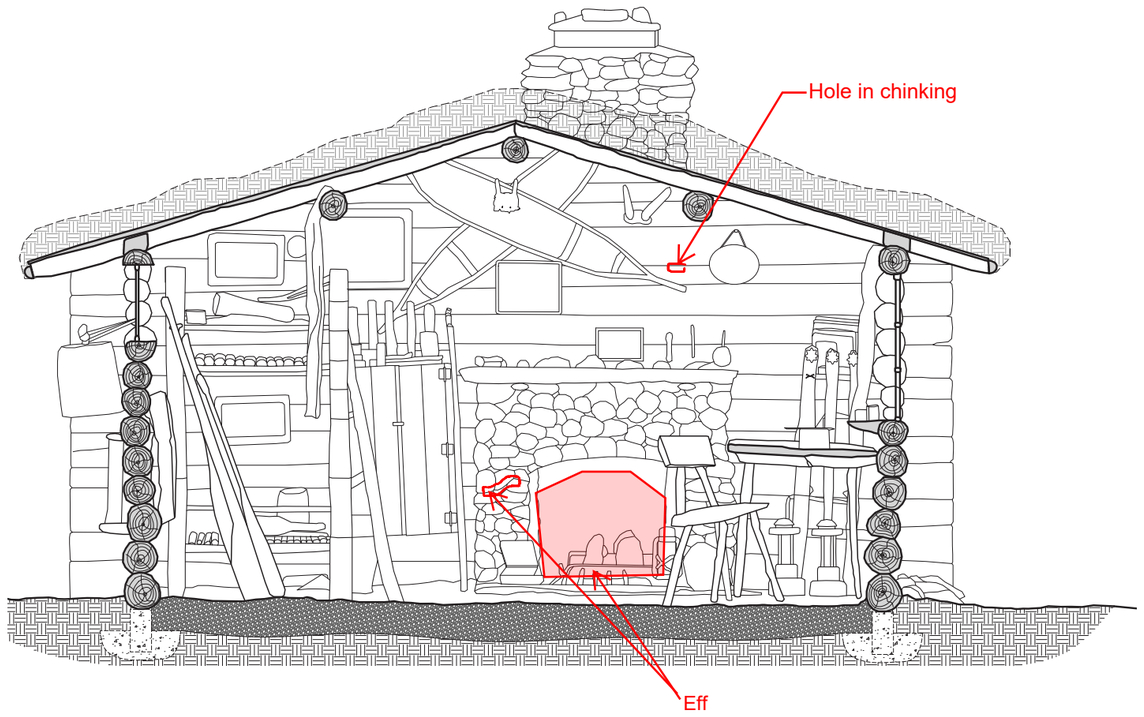
Conditions:

The stove appears in good condition but is no longer in use and was not tested. A fire extinguisher is kept under the adjacent table along with a smoke detector in the event of a fire.



Image 36: The foldable wood stove located near the entrance.

Proenneke's Cabin
Interior Condition Diagrams



CABIN SECTION A - LOOKING SOUTH

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

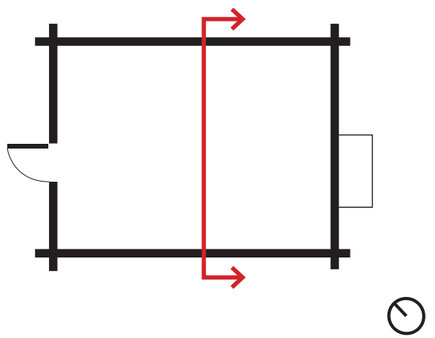
GENERAL CONDITIONS

None

CONDITION CODES

Eff Soiling: Efflorescence

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Interior Condition Diagrams

LEGEND

Features present that were not recorded in HABS drawings

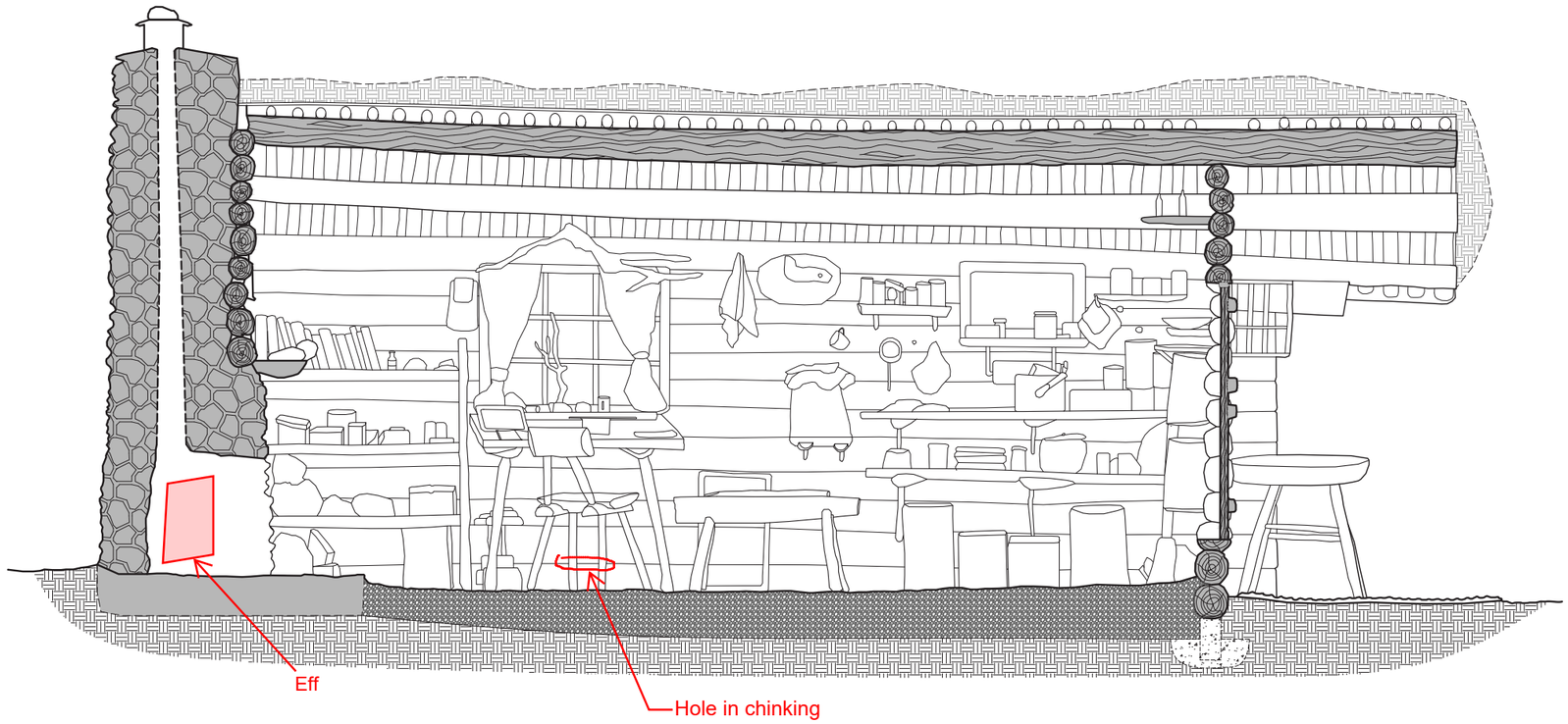
Area of deterioration

GENERAL CONDITIONS

None

CONDITION CODES

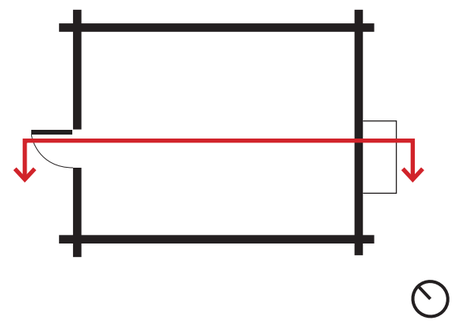
Eff Soiling: Efflorescence



CABIN SECTION B - LOOKING WEST

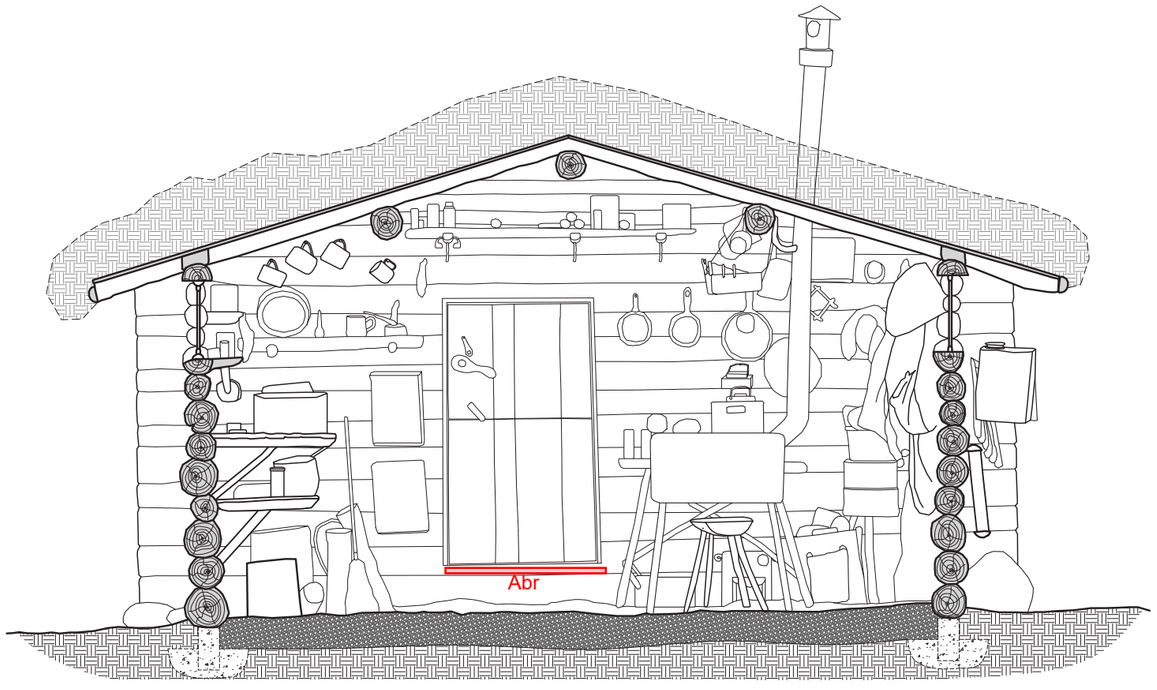
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LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Interior Condition Diagrams



CABIN SECTION C - LOOKING NORTH

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

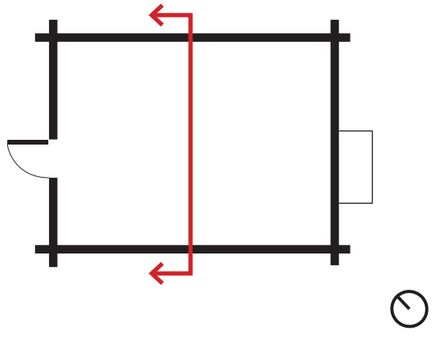
GENERAL CONDITIONS

None

CONDITION CODES

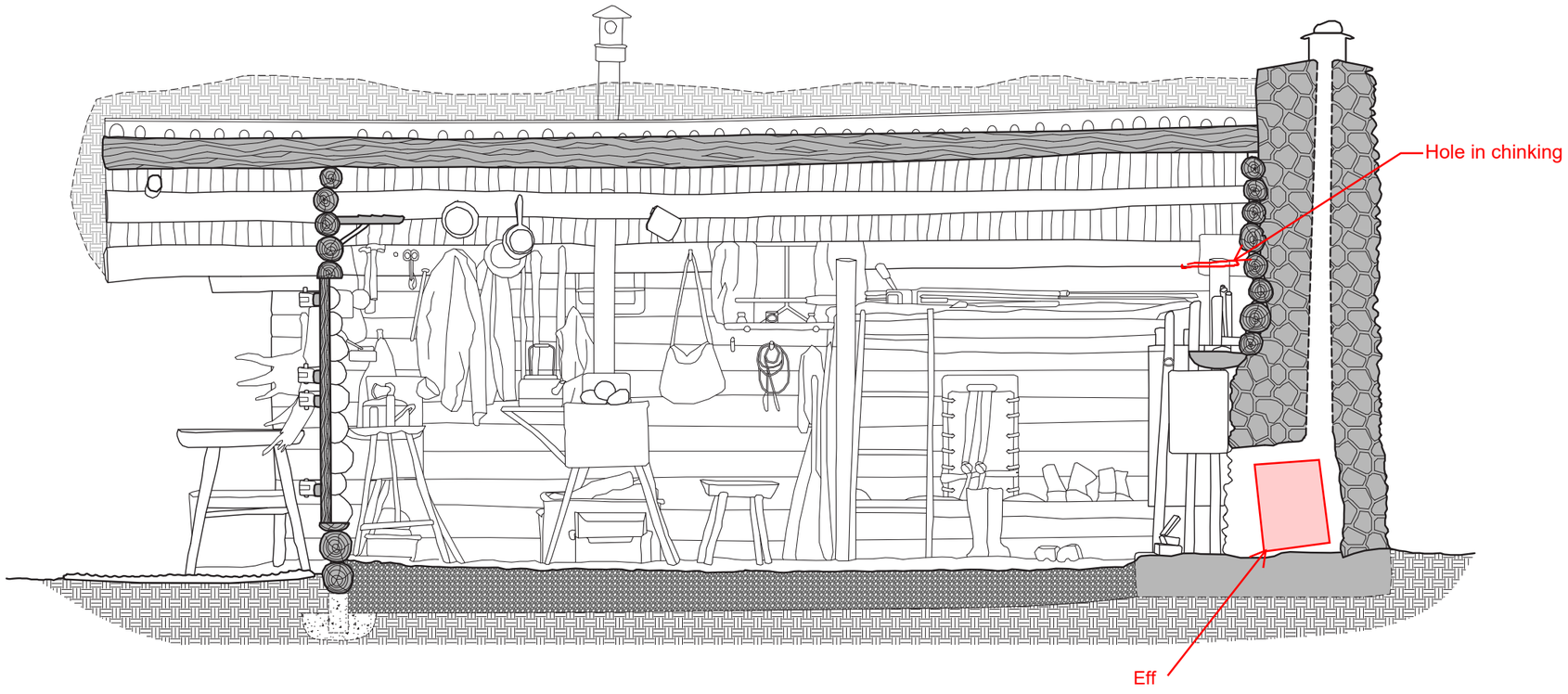
Abr Wood: Abraded

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Proenneke's Cabin
Interior Condition Diagrams



CABIN SECTION D - LOOKING EAST

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

GENERAL CONDITIONS

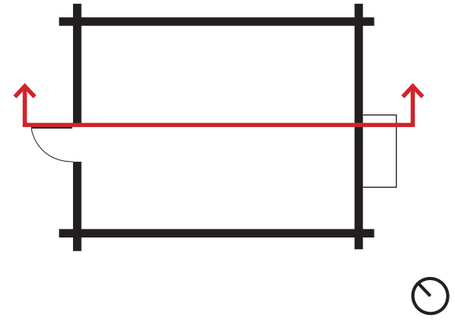
None

CONDITION CODES

Eff — Soiling: Efflorescence

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LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Cache, FMSS #58148



Image 37: West elevation of the cache as viewed from the beach.

GENERAL DESCRIPTION

The cache was constructed in 1969. Built to store dry goods, it is a raised log structure supported by 9' log poles to prevent animal entry. It is rectangular in plan at 6' x 4'and constructed of peeled, round spruce logs with saddle notching to match the cabin. The roof is also the same system as the cabin, constructed of spruce poles covered by sod and moss collected nearby. A small entry hatch door is located on the north elevation, accessed by a handmade wood ladder stored on the east elevation of the cabin. The door, hinges, and latch are carved of wood.

The interior is a simple open room with a spruce pole floor, exposed log walls, and exposed roof structure above.

CHARACTER DEFINING FEATURES

Character-defining features, the architectural materials and features that communicate the building's association with Dick Proenneke and his advocacy efforts, include:

- Rectangular plan
- Unbraced log post stilts
- Gabled roof with moss/sod roof covering
- Spruce retaining "pole net" supporting sod roof
- Spruce log construction with saddle notching
- Wood hatch door with handmade wood hinges and locking mechanism
- Single room volume
- Exposed structure as interior finishes

EXTERIOR CONDITIONS

Roof

The roof structure consists of spruce purlins supporting spruce pole rafters. The cache roof was replaced in 2001, including replacement of the rafters and fascia logs, new rubber underlayment, copper edge flashing, and new roof sod. The replacement sod was recycled from Spike's cabin. Borate rods have been installed throughout in 2004. The sod is topped with a spruce "pole net" structure to prevent sloughing over the eaves. Seasonal rangers water the roof during summer months to keep the sod alive.



Image 38: Gabled roof treated with sod.

Conditions:

Projecting spruce purlins and the "pole net" are weathered. Borate rod locations are plugged with custom wood plugs, which are migrating out of the logs.

The sod roof covering above the structure is holding up well and is in good condition. No sloughing of the sod was observed.



Image 39: Detail view contrasting typical weathering of logs (right) with black residue (left).

Exterior Walls

Exterior walls are constructed of peeled and round spruce logs harvested on site with saddle notching. Projecting log crowns are cut flush at each corner.

Conditions:

Logs are weathered at all elevations. An unknown black residue is spreading at the west and south elevations. Log checking is typical throughout and not of structural concern. Chinking is missing throughout, with daylight visible from the interior. Borate rod wood plugs are migrating out of their holes.



Image 40: Gaps between logs with missing chinking as visible from the interior of the cache.

Support Posts

The cache is supported by four 9' log posts, which were replaced in 2002. At this time, each leg base

was wrapped with “Q-wrap”, a copper napthanate/ borate wrap. Another copper sheet wraps each leg approximately 4’ from the top of each pole to prevent climbing animals.

Conditions:

The posts are weathered with minimal checking.

Exterior Door

The entrance door on the north elevation was hand made by Proenneke and is a wood batten door with wood carved strap hinges and lock.

Conditions:

The door, hinges, and lock are weathered.



Image 41: Cache log posts wrapped in copper.



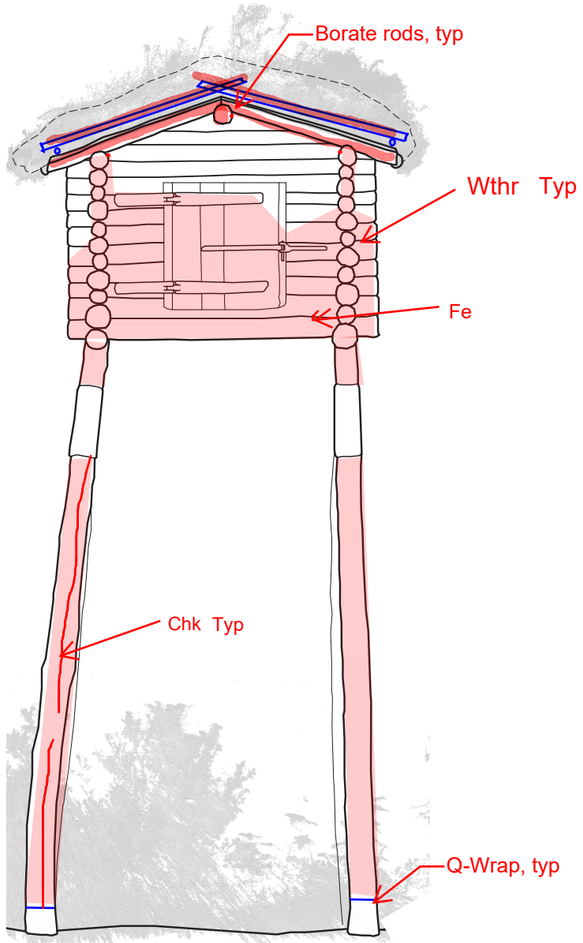
Image 42: Detail of the wood lock with minor checking.



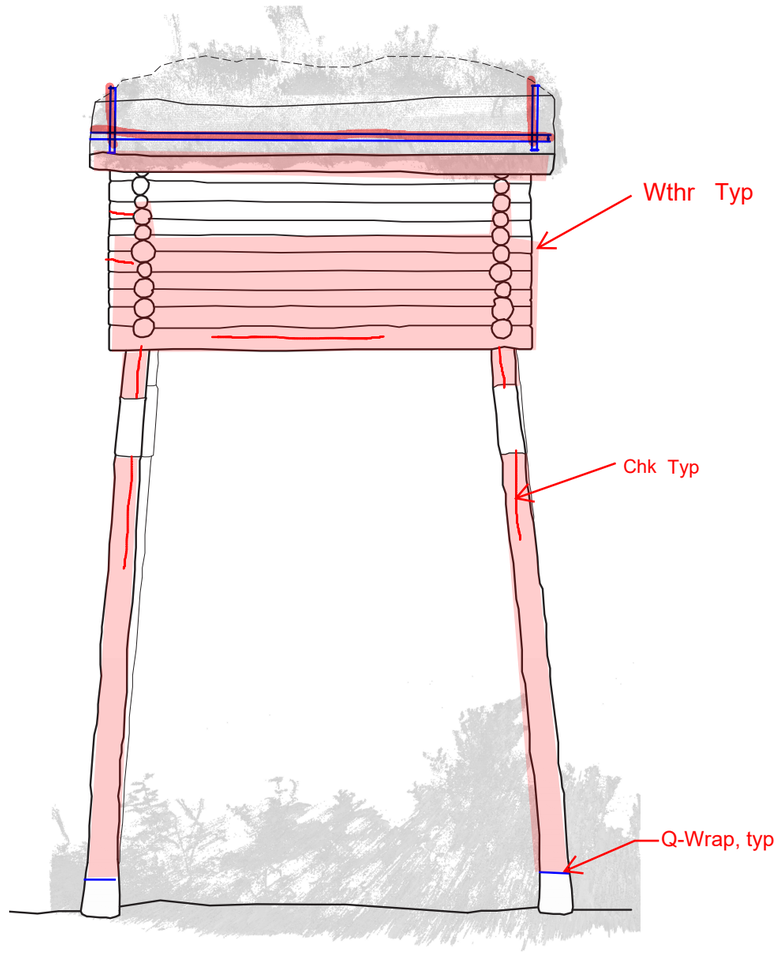
Image 43: Detail view of wood hinge.

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Cache
Exterior Condition Diagrams



CACHE NORTH ELEVATION



CACHE EAST ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

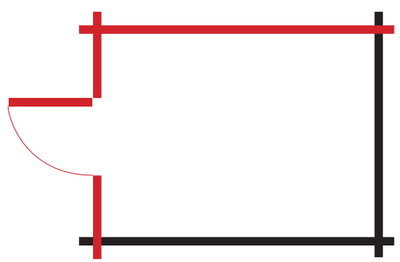
GENERAL CONDITIONS

Chinking missing throughout.

CONDITION CODES

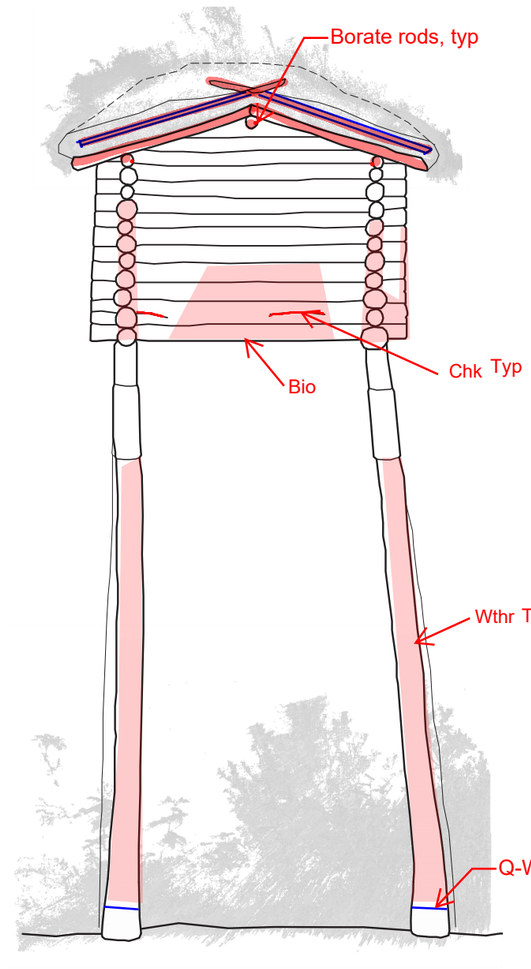
Fe	Embedment: Ferrous Element
Wthr	Wood: Weathered
Chk	Wood: Checking
Typ	Typical

LOCATION KEY

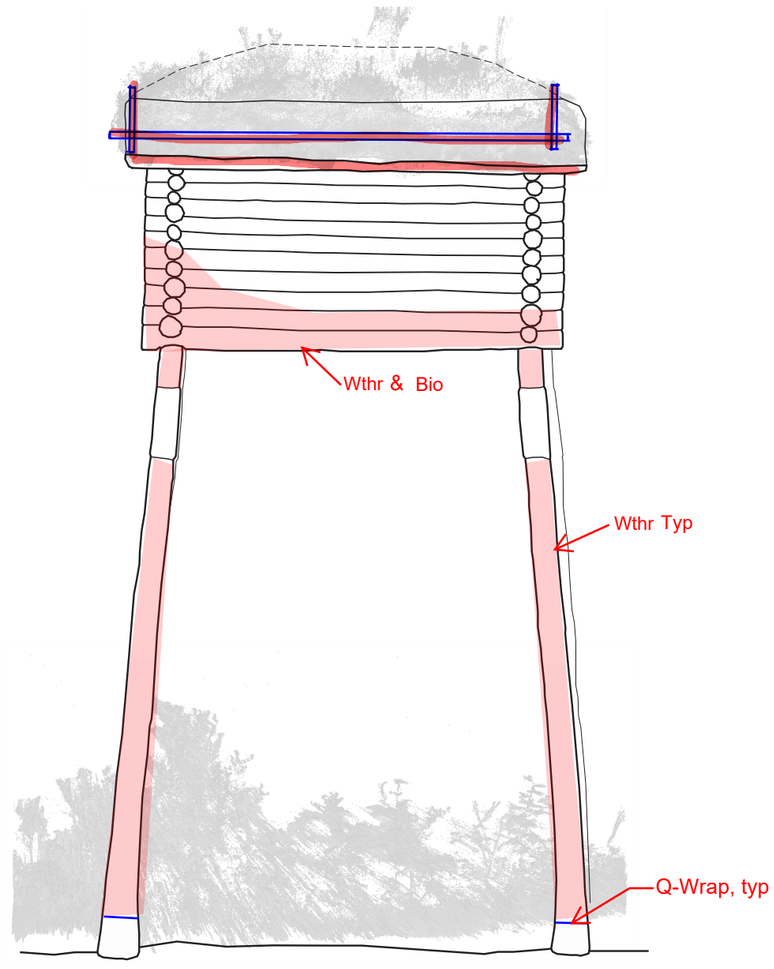


Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Cache
Exterior Condition Diagrams



CACHE SOUTH ELEVATION



CACHE WEST ELEVATION

LEGEND

Features present that were not recorded in HABS drawings

Area of deterioration

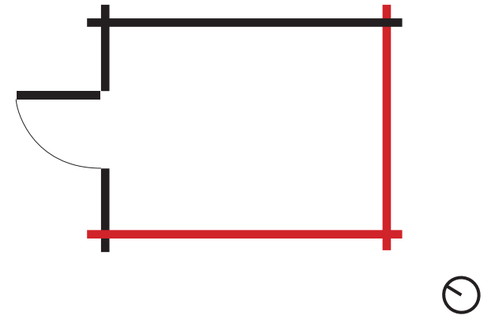
GENERAL CONDITIONS

Chinking missing throughout.

CONDITION CODES

Bio	Soiling: Biological
Chk	Wood: Checking
Wthr	Wood: Weathered
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

INTERIOR CONDITIONS

Interior Finishes

Finishes at the interior of the cache are minimal and include the exposed roof structure (log pole rafters and felt underlayment visible), exposed interior log walls, and a log pole floor.

The interior has largely been cleared of Proenneke's belongings, with some items still in storage.

Conditions:

Interior finishes were in good condition. Areas of missing chinking in the log walls were observed. See Exterior Wall section for more information.



Image 44: General interior view of the cache with exposed structure and stored items.



Image 45: Looking down at the log pole floor and carved wood door threshold.

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Woodshed, FMSS #58150



Image 46: Woodshed east elevation, with items stored against the log wall and trapping moisture.

GENERAL DESCRIPTION

The woodshed was constructed in 1968. It is a one-story rectilinear lean-to structure with an asymmetrical gable roof that runs east to west and is open to the north elevation. The building is 11' x 15' and constructed of peeled, round spruce logs with saddle notching to match the cabin. The roof is also the same system as the cabin's, constructed of spruce poles covered by sod and moss collected nearby. The roof covering was replaced in 2000 and again in 2017 by NPS. The roof is supported by three spruce posts at the north elevation.

Inside the shed is an open-air storage area for firewood and tools. Located in the southeast corner of the building is an enclosed outhouse approximately 33" wide. The outhouse has a wood batten door with a sliver moon carved in one of the battens.

Interior finishes are simple with an exposed dirt floor, exposed log walls, and exposed roof structure above.

CHARACTER DEFINING FEATURES

Character-defining features, the architectural materials and features that communicate the building's association with Dick Proenneke and his advocacy efforts, include:

- Rectangular plan
- Three spruce pole roof supports
- Asymmetrical gabled roof with moss/sod roof covering
- Spruce retaining "pole net" supporting sod roof
- Spruce log construction with saddle notching
- Enclosed outhouse with carved wood batten door
- Exposed structure as interior finishes

EXTERIOR CONDITIONS

Roof

The roof structure consists of spruce purlins supporting spruce pole rafters. The northern portion of the roof is cantilevered from the log wall and supported by three spruce poles. The roof was first repaired in 2000 with sod sourced from Emerson Creek, the addition of an EPDM rubber membrane recycled from the roof of the cabin, and the projecting ends of the purlins were capped with gas can flashing. Copper flashing was added in 2003. The roof covering above the rafters was again replaced in 2017 and includes a 15# felt underlayment, new 1/2" treated plywood sheathing topped with ice and water shield and wrapped in an EPDM rubber membrane, trimmed with copper edge flashing. All sod was replaced and sourced again from Emerson Creek. The sod is topped with a spruce "pole net" structure to prevent sloughing over the eaves. Three supporting poles were replaced in 2017 without NPS authorization or Section 106 compliance. Seasonal rangers water the roof during summer months to keep the sod alive.



Image 47: West elevation of the woodshed with asymmetrical gable roof.



Image 48: Detail view of typical roof layers, including copper edge trim, sod, and "pole net" structure. Sod is sloughing off the back end of the building.

Conditions:

Projecting spruce purlins are weathered with select areas of rot at their ends and under copper flashing caps. The base of the three support poles are weathered. The center support pole is shimmed where it joins the roof structure, with this shim cracked. Based on photographs, this shim has been replaced and relocated over the years and may not be original. The existing shim supports only the rafter tails, pushing these rafter tails up with potential for structural damage. This shim should be located below the purlin to provide support to the entire roof structure above. See image, right. Borate rods are plugged with custom wood plugs, which are migrating out of the logs. Copper flashing is in good condition and the pole net structure is weathered.



Image 49: Original post shim perpendicular to purlin (left) and replacement shim parallel with purlin (right) and cracked at the center pole of the north elevation.

According to conversations with NPS staff on site, a geotextile fabric was specified for the sod replacement but never installed. Sloughing of the sod was observed at the south elevation but appears to have stabilized. The pole net structure was reinforced with metal wires at the south elevation to reinforce the sod.

Exterior Logs

Exterior walls are constructed of peeled and round spruce logs harvested on site with saddle notching. Oakum is used as chinking, although much of it is missing. The gable ends are asymmetrical, with the shorter north eave cantilevered from the shed with stepped logs. Projecting log crowns at the south wall are chamfered and vary in length.

The sill logs and vertical half logs were replaced in 2004 due to wood rot, with copper flashing added to the perimeter at the same time. Borate rods were also installed in 2004 approximately every foot along the perimeter sill logs. These are all plugged with wood.

Conditions:

All logs are weathered at the east, west, and south elevations. Log checking is typical throughout and not of structural concern. Chinking is missing throughout. Items stored along the east elevation are trapping moisture against the log wall and is leading to biogrowth. Duff is built up along the south elevation perimeter. Borate rod wood plugs are migrating out of their holes. There is animal damage near the base of the west elevation, and evidence of wood boring insects at the west elevation of the interior outhouse. Insects were inactive and not of structural concern.

Nails and other fasteners project from the exterior log walls throughout the building, for which Proenneke hung his gear and other belongings. Some are now in use for seasonal display of artifacts.



Image 50: Typical weather of exterior logs and chamfered corners.



Image 51: Copper flashing visible along the perimeter of the building and outhouse.



Image 52: Detail of chamfered log ends and typical weather and mold.

Exterior Door

The entrance door on the north elevation of the outhouse is a simple wood batten door made with 1” thick material and metal strap hinges and a wood latch. One batten has a moon carved out.

Conditions:

The base of the door is weathered. The door can freely swing open, where it intersects with a cantilevered log at the east elevation wall. The top of one board is cracked where it hits this log, leaving a fractured section approximately 8” x 4-1/2”. This crack originated in 2018 and was repaired the same year using wood glue, but the repair has failed.

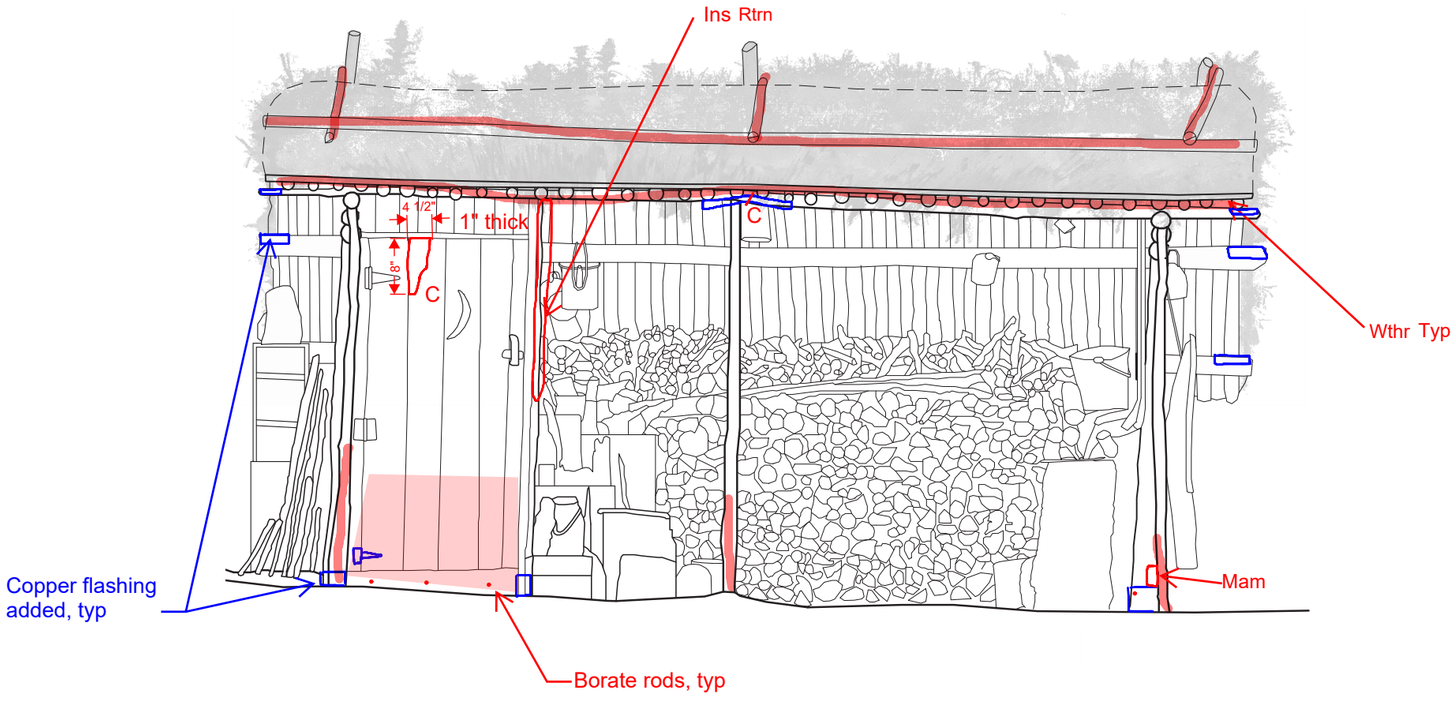


Image 53: The base of the outhouse door is weathered.



Image 54: A cracked board near the top of the outhouse door.

Woodshed
Exterior Condition Diagrams



WOODSHED NORTH ELEVATION

LEGEND

- Modifications after HABS drawings
- Area of deterioration

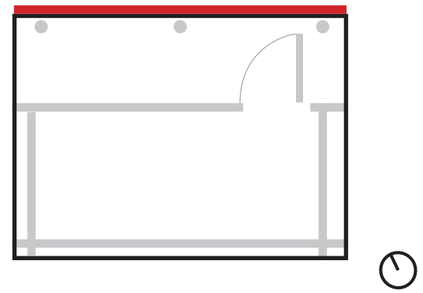
GENERAL CONDITIONS

Chinking missing throughout.

CONDITION CODES

C	Crack: Single Unit
Ins	Wood: Insect Damage
Rtrn	Located at Return
Wthr	Wood: Weathered
Chk	Wood: Mammal Damage
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Woodshed
Exterior Condition Diagrams

LEGEND

Modifications after HABS drawings

Area of deterioration

GENERAL CONDITIONS

Chinking missing throughout.

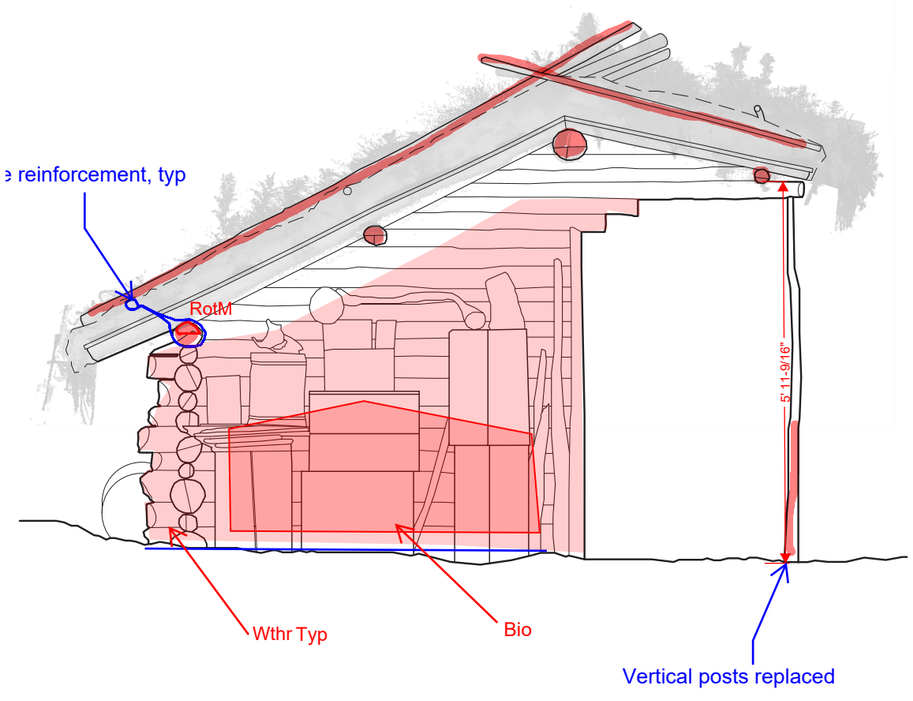
CONDITION CODES

RotM Wood: Moderate Rot

Wthr Wood: Weathered

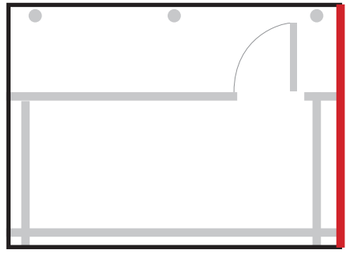
Bio Soiling: Biological

Typ Typical



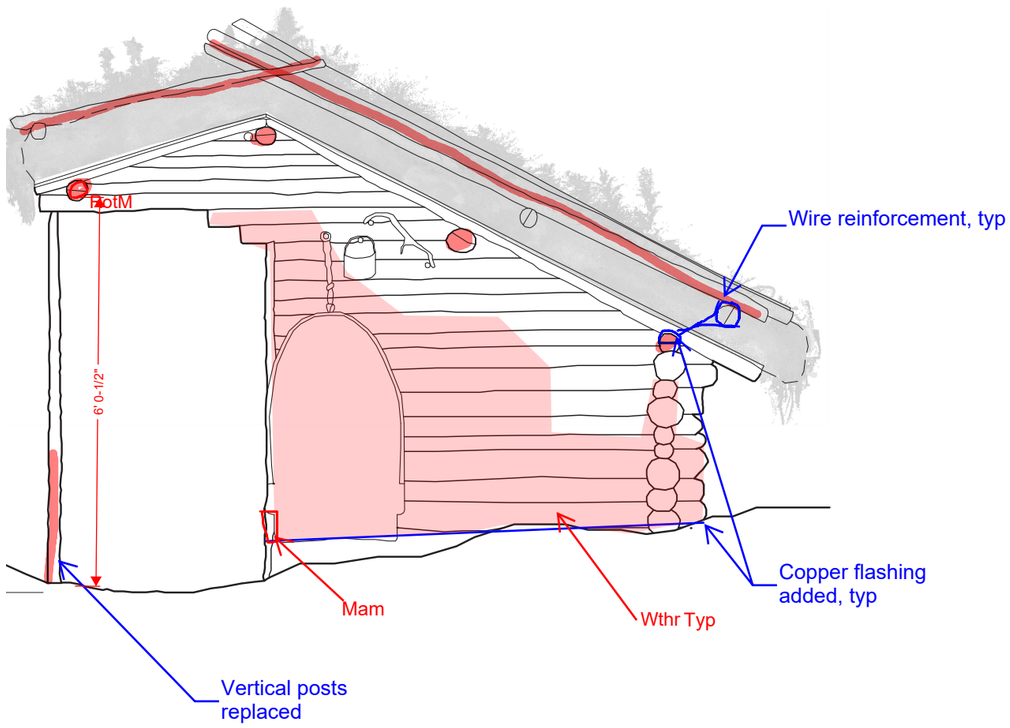
WOODSHED EAST ELEVATION

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Woodshed
Exterior Condition Diagrams



WOODSHED WEST ELEVATION

LEGEND

Modifications after HABS drawings

Area of deterioration

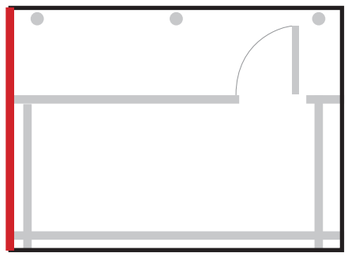
GENERAL CONDITIONS

Chinking missing throughout.

CONDITION CODES

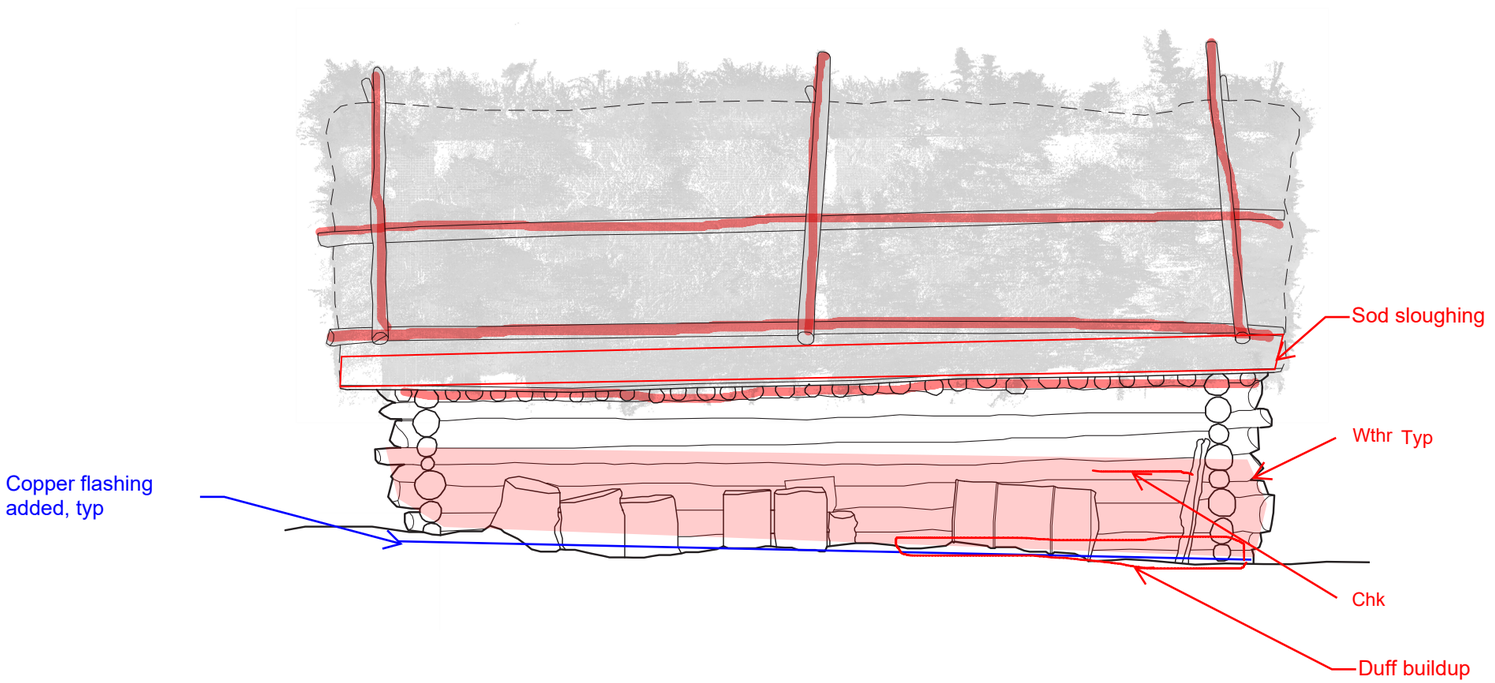
RotM	Wood: Moderate Rot
Mam	Wood: Mammal Damage
Wthr	Wood: Weathered
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

Woodshed
Exterior Condition Diagrams



WOODSHED SOUTH ELEVATION

LEGEND

Modifications after HABS drawings

Area of deterioration

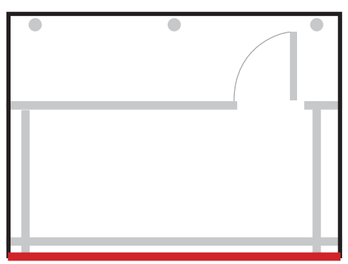
GENERAL CONDITIONS

Chinking missing throughout.

CONDITION CODES

Wthr	Wood: Weathered
Chk	Wood: Checking
Typ	Typical

LOCATION KEY



Conditions recorded on June 8, 2022. Underlays courtesy Historic American Buildings Survey, National Park Service. Delineated by Charleen Crespo-Lacomba, John Wachtel. 2018.

INTERIOR CONDITIONS

Interior Finishes

Finishes at the interior of the woodshed and outhouse are minimal and include the exposed roof structure (log pole rafters and felt underlayment visible), exposed interior log walls, and beach gravel floor.

Proenneke's tools and items are stored throughout the building, with items tucked within the roof structure above and surrounding the building.

Conditions:

Interior finishes are in good condition. Areas of missing chinking in the log walls were observed. See Exterior Wall section for more information.



Image 55: Exposed roof structure at the interior, with stored tools and other items between rafter poles.

Outhouse

The outhouse has a one-seat pit latrine constructed of wood and enclosed by vertical posts with their bark on. The latrine is lined with blazo can flashing, installed by Proenneke. The outhouse is no longer in use and a liner has been installed beneath Proenneke's original wood seat cover to prevent use. An outcan is provided behind the woodshed for public use.

Conditions:

The outhouse is in good condition. During the winter of 2017/2018, animal activity within the outhouse knocked over several oil cans, staining adjacent wood. Cleaning attempts have been made but the stain is still visible.



Image 56: Interior view of the outhouse with vertical posts at the walls and exposed gravel floor.

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2

Treatment & Use

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2.01 Treatment & Use



Image 57: Visitors arrive by float plane and are greeted by NPS staff and rangers.

OVERVIEW

All recommendations in this HSR follow *The Secretary of the Interior's Standards for the Treatment of Historic Properties*. The four treatment approaches, as described by the National Park Service's Technical Preservation Services, are:

"**Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses on the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location."

The following recommendations for overall treatment approach, appropriate uses, and alternative treatments are based on these four approaches.

CURRENT USE

The Richard L. Proenneke Site is now a Lake Clark National Park and Preserve exhibit. Access to the site is reliant on lake conditions and requires that upper Twin Lake be thawed for float plane landings. As a result, the visitor season is busy June-through September. During these months, the site is staffed by NPS with resident interpretive rangers available during established visiting hours between 8am-6pm. In the winter months, ski planes may access the site but the Proenneke cabin remains locked.

Visitors typically arrive via guided plane and overland trips. Private companies provide these excursions to the general public under Commercial Use Authorization (CUA) from NPS. Plane groups range between 2-9 people, and overland groups can be up to 10 people. There are no daily quotas or restrictions currently in place. Plane groups may stay on site for a tour, be dropped off for a few hours of independent exploration, or camp overnight. Camping is not allowed within the National Register designated boundary.

NPS interpretive rangers reside on site during the season to unlock buildings, provide tours, and monitor exhibit items. The rangers live in Hope and Spike's cabins and are expected to greet all visitors when they arrive during business hours.

FUTURE GOALS

Visitation has increased significantly over the years, from 411 seasonal visitors in 2010, up to 1603 visitors in 2021. There is no direct communication between CUAs and NPS rangers, and as a result visitors arrive unannounced at all times of day. NPS presence on site has transitioned from volunteers to dedicated park rangers. This trend indicates that the number of visitors will continue to rise, adding pressure to staffing the site and increasing wear and tear on built and natural resources.

Per the 2009 Lake Clark National Park and Preserve Foundation Statement, the Richard L. Proenneke Site is to be protected for interpretation "as a symbol of the national wilderness movement and a source of inspiration and solace sought out by visitors from throughout the world." The projected increase in visitation has prompted the park to consider the following changes to policy and operations with the goal of protecting both the natural and built resources:

- Increase the number of interpretive rangers seasonally housed on site (requiring additional accommodations)
- Implement a daily limit on visitation
- Establish a permit system for CUAs

The park is addressing the first bullet by rehabilitating Weisser's Cabin for transient staff housing.

PREFERRED TREATMENT & USE

The most appropriate treatment, based on continued use of the site as a park exhibit, is preservation. A preservation approach to future repairs and alterations prioritizes maintaining the craftsmanship and materials of the built resources to serve as interpretation of Proenneke's legacy in Lake Clark and the Alaska region.

Key aspects of the approach include:

- Repair and restoration of extant historic features
- Replacement of historic features and materials in-kind when repair is no longer feasible
- Continued use as a park exhibit
- Flexibility in creative approaches to protect the resource

The individual component recommendations in this report will focus on strategies aimed at maintaining and repairing existing historic fabric, securing

and protecting those features, and preserving the surrounding landscape and feeling of wilderness that initially drew Richard Proenneke to the site.

POTENTIAL ALTERNATIVE TREATMENTS & USES

Preservation ensures the greatest protection of buildings within the Richard L. Proenneke Site and supports the park's goal to continue use as an interpretive exhibit that houses artifacts from Proenneke's time in the region. Alternatively, a rehabilitation approach would provide for flexibility in programming the buildings, such as providing for overnight accommodations within the cabin itself for either NPS staff or public use. While occupying the buildings may help prevent animal break-ins and resulting damage, it displaces the exhibit's collection and threatens further wear and tear on the buildings from occupants, and is not recommended.

Another alternative treatment is restoration. Restoration of the Richard L. Proenneke Site would involve removal of the bear door and any added materials and detailing at the perimeter and roof assemblies. This approach would preserve Proenneke's craftsmanship in a more authentic manner. However, these interventions serve the purpose of solving threats to the buildings' long-term survival and were done with sensitivity to the historic integrity of the building, with the exception of the bear door.

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2.02 Requirements for Treatment



Image 58: West elevation of the cabin.

REGULATIONS & GUIDANCE

Requirements for treatment currently include laws, regulations, and standards as outlined by NPS in NPS-28: Cultural Resource Management (Chapter 8). The following are laws and regulations applicable to this site.

Legal Mandates & Policy Directives

- Section 106 of the National Historic Preservation Act (NHPA)
- NPS Cultural Resources Management Guidelines (Director's Order 28)
- Review of all proposed work by NPS Park and Regional cultural resources staff
- NPS Night Sky Initiative
- Lake Clark National Park and Preserve General Management Plan, 2014
- The Wilderness Act
- Alaska National Interest Lands Conservation Act (ANILCA)

The Secretary of the Interior's Standards for the Treatment of Historic Properties

- Standards and Guidelines for Preservation

Applicable Building Codes

(Code versions should be verified at time of project design)

- International Building Code (IBC)
- International Existing Building Code (IEBC)

Accessibility

- Architectural Barriers Act (ABA)

Hazardous Materials

- Environmental Protection Agency (EPA)
- Clean Air Act (CAA)
- Occupational Safety and Health Administration (OSHA)

Applicable NPS Preservation Briefs

- 02: Repointing Mortar Joints in Historic Masonry Buildings
- 04: Roofing for Historic Buildings
- 06: Dangers of Abrasive Cleaning to Historic Buildings
- 09: The Repair of Historic Wood Windows
- 16: The Use of Substitute Materials on Historic Building Exteriors
- 26: The Preservation and Repair of Historic Log Buildings
- 32: Making Historic Properties Accessible
- 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
- 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings
- 47: Maintaining the Exterior of Small and Medium Size Historic Buildings

BUILDING CODE ANALYSIS

The State of Alaska and NPS follow the International Building Codes, including the International Existing Building Code (IEBC). It is recommended that the most current IEBC be applied when consideration is given to making alterations. As existing buildings, without a substantial change in occupancy, not all clauses of the International Building Code apply. However, buildings should be made as safe as possible, within the parameters of historic character, use, and specific location.

The IEBC defines increasing levels of alterations that in turn trigger increasing levels of code compliance for existing buildings. These levels are defined as follows:

Alteration - Level 1: alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

Alteration - Level 2: alterations include the reconfiguration of space, the addition or elimination of any door or window, or the installation of any additional equipment.

Alteration - Level 3: where the work area exceeds 50% of the building area.

When planning to undertake future projects, the level of alteration should be identified in order to meet the required level of compliance with the IBC. If using a preservation approach, the only applicable level of alteration is Level 1.

CODE ANALYSIS FACTORS	
Date of Construction	1968
Construction Type	V
Occupancy Type	Assembly A-3 (Museum)
Sprinklered	No

ACCESSIBILITY

Federal properties, including those in national parks, must seek compliance with the Architectural Barriers Act (ABA) Standards. These standards apply to facilities designed, built, altered, or leased with federal funds. *NPS Director's Order 42: Accessibility* provides a clause for historic resources, recommending that they be made as accessible as possible provided that efforts do not negatively impact the integrity of the resource. It calls for the degree of accessibility provided to be proportionately related to the degree of human-made

modifications in the area surrounding the facility. Given the low impact of proposed treatments to both the Richard L. Proenneke Site and structures in this report (preservation, Level 1 Alteration), no major alterations are proposed to trigger compliance with ABA Standards.

As an exhibit that is open to the public, its occupancy type is classified as Assembly group A-3 (Museum). Aspects of accessibility typically considered for this occupancy group in a Level 2 Alteration or above include improving the path of travel, providing access without steps, complying with door sizes and threshold heights, and providing an accessible restroom. These modifications would have a significant negative impact on the cultural and natural resources of the site and are not recommended.

In general, the location, site, and buildings at the Richard L. Proenneke Site are remote, difficult to access, and not accessible to wheelchairs due to float plane safety standards. Improvements have been made to accommodate other physical disabilities and frequent visitors from the Operation Heal Our Patriots program, such as maintaining a clear and level pathway around the cabin.

An alternative equivalent experience to visiting the site for those who cannot make the trip should be provided to the public, such as a virtual reality tour or online interpretation sessions.



Image 59: Gravel trail that leads from the float plane beach drop-off to Proenneke's Cabin.

LIFE SAFETY CONCERNS

Smoke Detectors and Fire Extinguishers

Annual observation and maintenance of smoke detectors and fire extinguishers should be maintained as part of the interpretive ranger responsibilities.

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2.03 Treatment Recommendations



Image 60: Looking south along the east elevation of the cabin towards the cache.

OVERVIEW

The following treatment recommendations are guided by *The Secretary of the Interior's Standards for Preservation* and general preservation best practices. Recommendations are given with respect to the site being within a designated Wilderness Area. Recommendations are provided for each assembly/component. The Recommended Treatment represents the best practices for the preservation of the building and its historic integrity. Alternatives to the recommended treatment are identified where they exist, including a no action alternative. Recommended and Alternative Treatments are further analyzed in Section 2.04, Assessment of Effect.

TREATMENT PRIORITY

Each treatment recommendation is accompanied by a key to identify its priority.

Treatments are prioritized based on the severity of the condition and urgency of repair. The priorities are defined as:

1 **Priority 1 - Critical:** (Immediate - Year Two) Items in this category require immediate action within two years.

2 **Priority 2 - Necessary:** (Year Two - Year Five) Items in this category are not yet critical but require prompt attention.

3 **Priority 3 - Recommended:** (Year Five - Year Ten) Items in this category represent a necessary but longer-term improvement to restore original conditions.

M **Maintenance (Cyclical):** Items in this category are cyclical maintenance tasks.

General Site

General Site

Recommended Treatment:

M Continue method of deterring foot traffic on adjacent fragile tundra by lining designated trails with small branches. See Assessment of Effect action #1.

M Maintain landscape clearances and viewsheds as identified in the 2022 Cultural Landscape Report. See Proenneke Site Preservation Diagram. See Assessment of Effect action #1.

M Maintain landscape features such as beach jetties. Clear any vegetative growth from jetties seasonally to retain original appearance.

Ranger's Quarters

Recommended Treatment:

M Maintain use of Hope's and Spike's cabins as single occupancy ranger's quarters, and maintain use of the Weisser cabin as a shop and storage building. See Assessment of Effect action #1.

1 Install "Private Residence" sign on inland trail between the Richard L. Proenneke Site and Hope's Cabin to deter visitors. The USGS bearing tree is one option for the location of this sign, as another sign already exists on the tree and it is about 1/4 mile up the trail and out of view. See Proenneke Site Recommendations Diagram for location. See Assessment of Effect action #2.

1 Install "Private Residence" signs along paths leading from beach to Spike's and Hope's cabins. Signs to be addded to the side of the path and not visible from the shore to preserve the lakeshore viewshed. See Proenneke Site Recommendations Diagram for location. See Assessment of Effect action #2.

Alternative Treatment:

Alternative 1 - Convert the Weisser Cabin to Ranger's Quarters

2 Increase seasonal ranger presence to 3 by converting the cabin to another ranger's quarters. See Assessment of Effect action #1.1.

3 Provide for displaced storage adjacent to the Weisser's Cabin. See Proenneke Site Recommendations Diagram for location. See Assessment of Effect action #1.2.

Alternative 2 - Construct New Ranger's Quarters

3 Constructing a new ranger's quarters to house 2-4 persons would allow for public interpretation of Hope's and Spike's cabins but would require new construction within a Wilderness Area, a challenge that is not recommended. See Assessment of Effect action #1.3.

Camping

Recommended Treatment:

M Maintain use of designated camping area south of the Hope Creek delta. Provide additional designated sites within this camping area as demand increases. See Assessment of Effect action #1.

Proenneke Site Recommendations Diagram

LEGEND

Proposed “Private Residence” sign locations

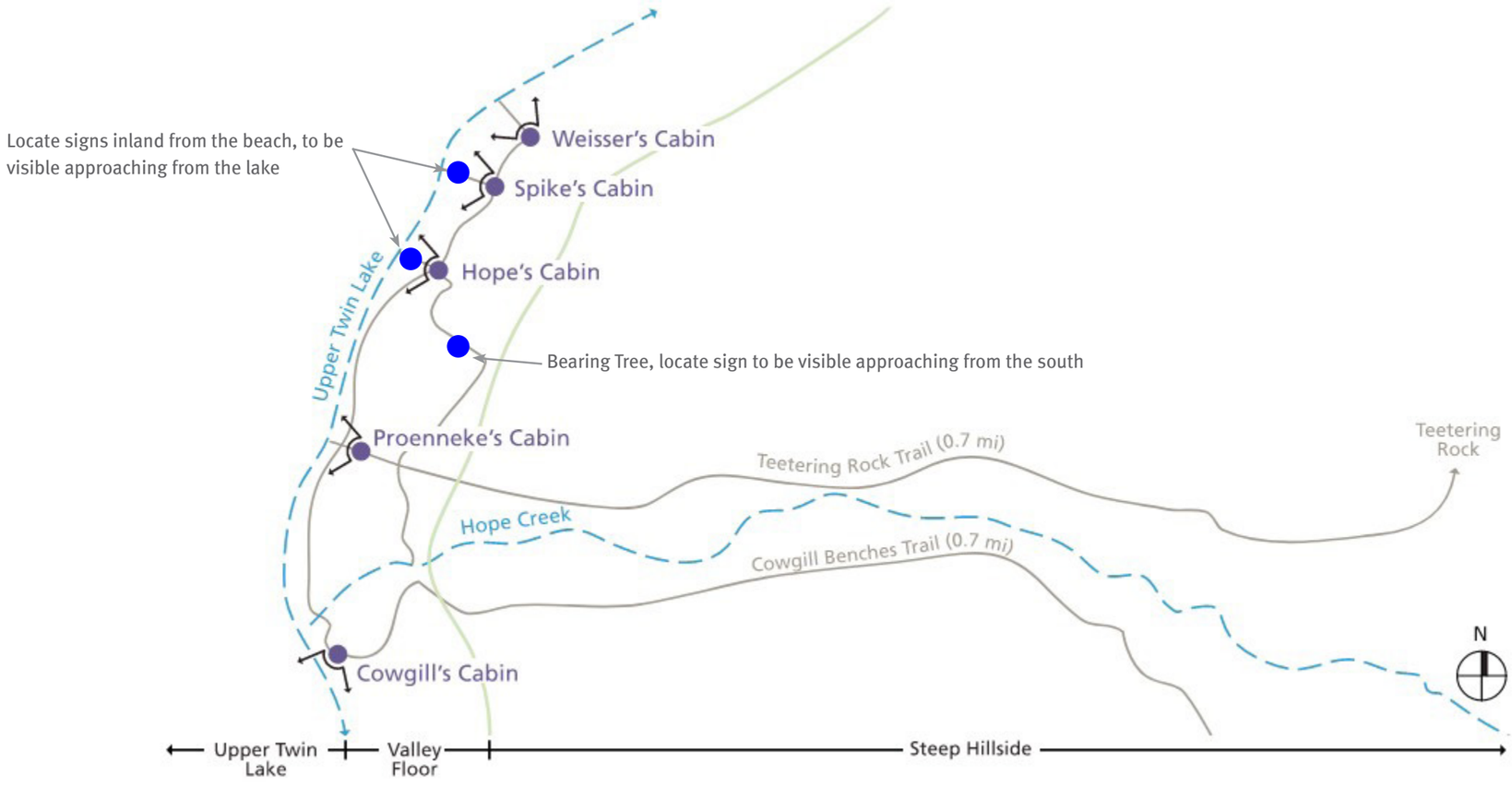


Image 61: Figure 3-9 from the 2022 Cultural Landscape Report depicting the Richard L. Proenneke Site and adjacent cabins.

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BUILDING EXTERIOR

Roof

Recommended Treatment:

1 Replace flashing around chimney. Lap new copper flashing to create a positive drainage away from the chimney. Tie into existing mortar joints where possible. Seal all fasteners and joints with mastic, inspecting annually at the beginning of each visitor season. Replace damaged tar paper in-kind.

M Maintain existing sod roof and improved roof underlayment and flashing. Continue seasonal watering as necessary using fire protection backpack sprayers. Additional flashing and/or modification of the eave line is not recommended. See Assessment of Effect action #1.

2 Remove and reinstall copper purlin caps with cedar breather underlayment or equivalent to maintain airflow and reduce wood rot. See Assessment of Effect action #1.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

3 For future reroofing efforts at the end of the existing sod roof's service life, incorporate a geotextile beneath the sod roof covering for reinforcement. Continue practice of taking sod from Emerson Creek, outside of the historic boundary. See Assessment of Effect action #1.

Exterior Walls

Recommended Treatment:

M Monitor checked logs annually for compiling debris. Clean using compressed air at the start and end of each visitor season to remove debris and prevent wood rot. See Assessment of Effect action #1.

M Infill areas of missing chinking with natural (unoiled) oakum seasonally. See Assessment of Effect action #1.

1 Send a sample of unidentified black residue on exterior face of logs to NCPTT for confirmation of its origin prior to identifying a cleaning method. See Assessment of Effect action #1.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

2 Dutchman patch areas of sill log animal damage. Remove damaged area to sound material. Install wood patch matching the existing wood species (Spruce), profiles, and grain direction. See Assessment of Effect action #1.

Exterior Windows

Recommended Treatment:

M Maintain existing west window and metal grille, cleaning behind the glass pane every 4-5 years. See Assessment of Effect action #1.

Exterior Door

Recommended Treatment:

M Maintain existing door. Limit use of lock and handle. Wax hinge pins, bushings, and locking mechanism every 3-4 years or as necessary using a microcrystalline wax, Renaissance brand or equivalent. Waxing to be performed by a skilled wood restoration carpenter only. Replace hinge pins at the end of their service life, matching the existing pins and tin can sleeves. See Assessment of Effect action #1.

2 Repair cracked hinge. Three options for repairing are to 1) Repair-in-place by or under the supervision of a historic wood conservator using a wood epoxy to deter crack expansion; 2) Remove hinges now to preserve them intact and provide replicas to match existing; 3) Remove hinges later when cracking progresses to failure and replace at that time. As the crack has not progressed since 2018, it is recommended to repair-in-place now, and remove them only upon failure, where they can they be repaired off-site and preserved for interpretation. See Assessment of Effect action #1.

2 Monitor animal damage. If damage progresses, consider light sanding to sound material. See Assessment of Effect action #1.

1 Repair cracked wood strike in door frame using epoxy to secure pieces from fracturing further. See Assessment of Effect action #1.

2 Remove existing bear door and associated ground supports. Design and construct a new exterior bear door to protect the door while not detracting from the building exterior. Consideration should be given to a vacuum-formed and molded fiberglass door or similar material that resembles the historic door's appearance. See Assessment of Effect action #3.

Securing of the new bear door to the building should avoid damage to all log members. The door should be secured via fasteners installed between logs/within the log chinking.

River Stone Chimney

Recommended Treatment:

1 Monitor chimney settlement for movement by installing a corner crack gauge between the chimney and log wall, such as Grainger's Concrete Corner Crack Monitor epoxied to the perpendicular surfaces. See Assessment of Effect action #1.

2 Repoint cracked mortar joint. Match the original mortar in color, texture, aggregate, composition, and tooling. See Assessment of Effect action #1.

Wood Stove Chimney

Recommended Treatment:

M Maintain existing wood stove chimney. Inspect chimney cyclically, once every year at the end of each season. See Assessment of Effect action #1.

BUILDING INTERIOR

Interior Finishes

Recommended Treatment:

M Maintain existing interior finishes, dusting annually. Clean interior finishes and features with thyme oil as necessary when mold arises. Rake and replace beach gravel as necessary to keep foreign debris out of cabin. See Assessment of Effect action #1.

M Monitor ridge pole and purlins for visible sagging at the beginning of each summer season. See Assessment of Effect action #1.

Beach Stone Fireplace

Recommended Treatment:

2 Neutralize efflorescence using a 50/50 mix of distilled water and white vinegar. See Assessment of Effect action #1.

M Prohibit placement of metal objects on hearth to prevent rust staining. Inspect firebox annually for efflorescence. See Assessment of Effect action #1.

Wood Stove

Recommended Treatment:

M Maintain existing stove. Inspect annually at the end of each season if use of wood stove is restored. Clean stove if evidence of use is apparent. See Assessment of Effect action #1. See Wood Stove Chimney recommendations for additional information.

Fire and Life Safety

Recommended Treatment:

M Maintain battery-powered smoke detector and fire extinguisher during operational season, with cyclical inspections to check smoke detector batteries.

BUILDING EXTERIOR

Roof

Recommended Treatment:

M Maintain existing sod roof and improved roof underlayment and flashing. Continue seasonal watering as necessary using fire protection backpack sprayers. Additional flashing and/or modification of the eave line is not recommended. See Assessment of Effect action #1.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

3 For future reroofing efforts at the end of the existing sod roof's service life, incorporate a geotextile beneath the sod roof covering for reinforcement. Continue practice of taking sod from Emerson Creek, outside of the historic boundary. See Assessment of Effect action #1..

Exterior Walls

Recommended Treatment:

M Monitor checked logs annually for compiling debris. Clean using compressed air at the start and end of each visitor season to remove debris and prevent wood rot. See Assessment of Effect action #1.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

M Infill areas of missing chinking with natural (unoiled) oakum seasonally. See Assessment of Effect action #1.

1 Send a sample of unidentified black residue on exterior face of logs to NCPTT for confirmation of its origin prior to identifying a cleaning method. See Assessment of Effect action #1.

Exterior Door

Recommended Treatment:

M Maintain existing door. Wax hinge pins and bushings every 3-4 years or as necessary using a microcrystalline wax, Renaissance brand or equivalent. Waxing to be performed by a skilled wood restoration carpenter only. See Assessment of Effect action #1.

BUILDING INTERIOR

Interior Finishes

Recommended Treatment:

M Maintain existing interior finishes. See Assessment of Effect action #1.

BUILDING EXTERIOR

Roof

Recommended Treatment:

M Maintain existing sod roof and improved roof underlayment and flashing. Continue seasonal watering as necessary using fire protection backpack sprayers. Additional flashing and/or modification of the eave line is not recommended. See Assessment of Effect action #1.

2 Remove and reinstall copper purlin caps with cedar breather underlayment or equivalent to improve airflow and reduce wood rot. See Assessment of Effect action #1.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

2 Replace cracked shim at center support pole, installed beneath and perpendicular to purlin as documented in adjacent image. Match existing species (Spruce). Relocate support pole and trim height as necessary to fit. See Assessment of Effect action #1.

3 For future reroofing efforts at the end of the existing sod roof's service life, incorporate a geotextile beneath the sod roof covering for reinforcement. Continue practice of taking sod from Emerson Creek, outside of the historic boundary. See Assessment of Effect action #1.



Image 62: 1984 image of Proenneke's woodshed with support pole and shim. Image from LACL Museum Collection, Accession LACL-00099.

Exterior Walls

Recommended Treatment:

M Monitor checked logs annually for compiling debris. Clean using compressed air at the start and end of each visitor season to remove debris and prevent wood rot. See Assessment of Effect action #1.

M Clear north elevation perimeter of duff, and provide a gap at the west elevation perimeter between stored items and the exterior wall to prevent moisture entrapment and any associated biogrowth.

2 Install new borate rods at existing locations, Impel Rods or equivalent. Plug holes with spruce wood plugs. Follow manufacturer's instructions for installation. See Assessment of Effect action #1.

M Infill areas of missing chinking with natural (unoiled) oakum seasonally. See Assessment of Effect action #1.

[2] Dutchman patch areas of sill log animal damage. Remove damaged area to sound material. Install wood patch to match the existing wood species (Spruce), profiles, and grain direction. See Assessment of Effect action #1.

Exterior Door

Recommended Treatment:

[2] Epoxy repair fractured board. See Assessment of Effect action #1.

BUILDING INTERIOR

Interior Finishes

Recommended Treatment:

[M] Maintain existing interior finishes. Rake and replace beach gravel as necessary to keep foreign debris out of shed. Maintain an air gap between the stack of wood and the interior walls to prevent moisture entrapment. See Assessment of Effect action #1.

Outhouse

Recommended Treatment:

[M] Maintain existing interior finishes. Consult a wood conservator to find a poultice and/or solvent to remove oil staining. Test a 1" area to confirm cleaning method will not damage the wood substrate prior to full cleaning. Rake and replace beach gravel as necessary to keep foreign debris out of outhouse. See Assessment of Effect action #1.

[M] Infill areas of missing chinking with natural (unoiled) oakum seasonally. See Assessment of Effect action #1.

2.04 Assessment of Effect for Recommended Treatments



Image 63: A float plane lands on upper twin lake to pick up NPS staff from the Richard L. Proenneke Site.

COMPLIANCE

Section 106 of the National Historic Preservation Act (NHPA) of 1966 mandates that every federal undertaking or federally funded undertaking must determine what effects, if any, it will have on historic resources, and take appropriate measures to mitigate any adverse effects.

Degree of Effect

The effect of a recommended treatment or action on an historic resource is defined by the degree of impact to the resource's character-defining features. The Advisory Council on Historic Preservation's (ACHP) assessment criteria ask "Does the undertaking have the potential to alter characteristics of historic properties such as location, design, setting, workmanship, materials, feeling, and association? Will it cause visual, audible, or atmospheric intrusions not in keeping with a property or its setting, or change the use of the property?"

As defined by NPS-28: Cultural Resources Management Guidelines, the degree of effect is measured as one of the following three findings:

- **No Effect:** An action will not impact any historic resources.
- **No Adverse Effect:** An action will have an impact on the historic resource but not an adverse impact.
- **Adverse Effect:** An action that alters the characteristics that qualify a property for inclusion in the National Register in a manner that would diminish the integrity of the property. Adverse effects can be direct or indirect. They include reasonably foreseeable impacts that may occur later in time, be farther removed in distance, or be cumulative.

The Secretary of the Interior's Standards

An established pathway to assuring treatments will not result in an adverse effect is to adhere to *The Secretary of the Interior's Standards* for the treatment approach determined applicable to the project.

Preservation has been determined the appropriate approach for the Richard L. Proenneke Site for long-term maintenance of the site and buildings as an exhibit for visitors with minimal alteration.

The *Standards* pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and the interior of historic buildings. The *Standards* also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction. The *Standards* for Preservation are as follows:

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Parameters for Compliance

Any project conducted within the boundaries of Lake Clark National Park and Preserve, whether it is related to the site, site features, or structures (both new construction and alterations to an existing building), is to undergo Section 106 compliance per NHPA. Proposed changes to the landscape or buildings associated with the Richard L. Proenneke Site will require consultation well in advance of project activities, beginning with the park's Section 106 Coordinator and Cultural Resources Management team.

There is potential to have adverse effect if the *Secretary of the Interior's Standards* are not followed. The treatments recommended in this report are in accordance with the *Standards*.

AREA OF POTENTIAL EFFECT: BUILDINGS & SITE, RICHARD L. PROENNEKE SITE							
#	Recommended Treatment/Action	Meets Secretary of the Interior's Standards	Determination of Effect	Analysis	Parameters for Compliance	Action Alternatives	No Action Alternative
1	Maintain, repair, and replace historic materials and features in kind.	Yes	No adverse effect	Standard preservation practice	All materials required for replacement to match existing	1.1, 1.2	Features and materials continue to deteriorate and ultimately fail.
2	Install "Private Residence" sign along trail leading to Hope's Cabin	Yes	No adverse effect	Deters visitor foot traffic from accessing ranger's quarters	Sign shall remain out of view from the Richard L. Proenneke Site		Visitor traffic remains unmanaged throughout the site and adjacent properties.
3	Replace protective bear door	Yes	No adverse effect	Protects original wood dutch door while showcasing its design and limiting impact to building exterior	All fasteners to be located between logs and within chinking to limit damage to log exterior		Existing bear door remains, rangers struggle operating, and original door is not visible when protected.
4	Maintain existing wood stove and chimney	Yes	No adverse effect	Preserve original stove and replica stove pipe	Existing stove remains unutilized to protect from fire risk	4.1	Fire and life safety risk

AREA OF POTENTIAL EFFECT: BUILDINGS & SITE, RICHARD L. PROENNEKE SITE							
#	Alternative Treatment/Action	Meets Secretary of the Interior's Standards	Determination of Effect	Analysis	Parameters for Compliance	Action Alternatives	No Action Alternative
1.1	Convert the Weisser Cabin to ranger's quarters	Yes	No adverse effect	Provides for (1) additional on-site ranger for visitor management while restoring the existing cabin as sleeping quarters that is outside of the historic boundary.	The exterior building appearance should remain unaltered.	1.2	Ranger presence is limited to (2) per season, housed in Spike's and Hope's Cabins
1.2	Provide new storage box adjacent to Weisser's Cabin	Yes	No adverse effect	Provides for storage use following the conversion of the Weisser Cabin to a ranger's quarters	A separate storage unit should be a temporary box and remain out of the viewshed from the cabin.	N/A	No storage space is provided
1.3	Construct new ranger's quarters	No	Adverse effect	Provides for (2) additional on-site rangers for visitor management through the construction of a new quarters, but construction of a new building goes against the Wilderness Act and would detract from the site's historic integrity	N/A	1.1	Ranger presence is limited to (2-3) per season, housed in Spike's and Hope's Cabins (and Weisser's, if converted)

3

Record of Treatment

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NOTE TO AGENCY:

Information documenting actual treatment implementation should be added to this section. This can include accounting data, photographs, sketches, and narratives outlining the course of work, conditions encountered, and materials used.

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Appendix

References A

Relevant Drawings B

Recommended Products/Cutsheets C

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Appendix A - References

REFERENCES

Bishop, Tina, et al. *Twin Lakes (Nilqidlen Vena) Cultural Landscape Inventory and Cultural Landscape Report.* Port Alsworth, AK: Lake Clark National Park and Preserve, 2022.

Branson, John B. *National Register of Historic Places nomination: Proenneke, Richard L., Site.* Port Alsworth, Alaska: Lake Clark National Park and Preserve, 2007.

"Draft - SP-Proenneke Complex Preservation Plan II" Document provided by NPS. 2001.

Myers, Kathryn. "Chronology of work done at RLP cabin." Anchorage, AK: National Park Service. Last updated July, 2022.

Proenneke, Richard L. *Journals of Richard Proenneke, 1967-1996*. Document provided by NPS. 1996.

Robinson, Monroe. "Robinson 2001 Report on Work." Document provided by NPS. 2001.

Robinson, Monroe. "Robinson 2003 Report on Work." Document provided by NPS. 2003.

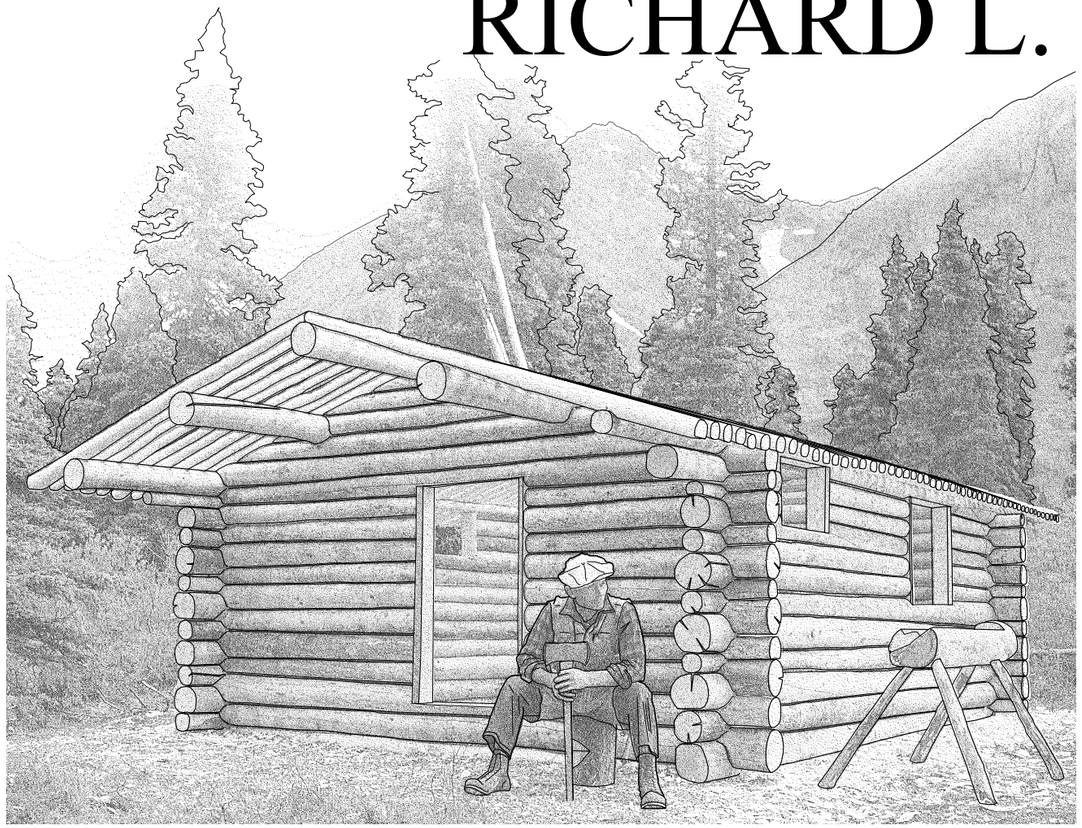
Robinson, Monroe. "Robinson 2004 Report on Work." Document provided by NPS. 2004.

Robinson, Monroe. "Tasks to be Addressed with Special Services Contract at the Proenneke Site in 2004." Document provided by NPS. 2004.

Appendix B - Relevant Drawings

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RICHARD L. PROENNEKE SITE



Drawing based off of photograph taken by Richard Proenneke during construction of his cabin. Photo courtesy of the Donnellson Public Library/Richard Proenneke Museum, near Proenneke's hometown of Primrose, Iowa.

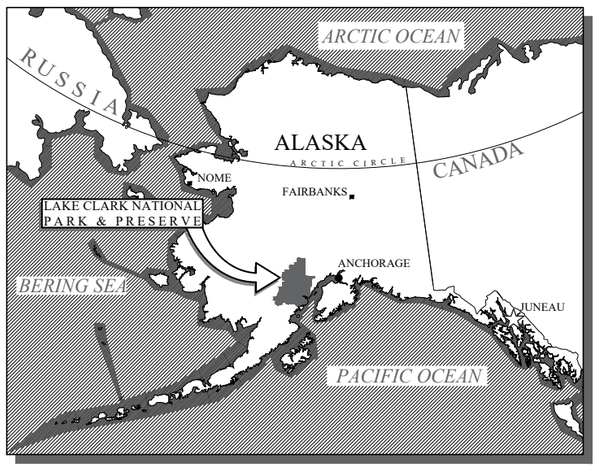
The Richard L. Proenneke Site is located in Lake Clark National Park and Preserve on the southeast shore of Upper Twin Lakes. The cabin on site was listed in the National Register of Historic Places on March 8, 2007 and is one of the finest examples of log cabin craftsmanship in the Lake Clark area. Richard Louis Proenneke (1916-2003) designed and built the structures on site, which include a cabin, cache, and woodshed.

Richard "Dick" Proenneke was an advocate for wilderness preservation, a self-taught naturalist, a wildlife photographer, and a journalist. Proenneke documented his life at Twin Lakes in his journals, parts of which were adapted into a book titled *One Man's Wilderness*. Proenneke lived in his cabin between 1968 and 1998, when old age forced him to retire to California.

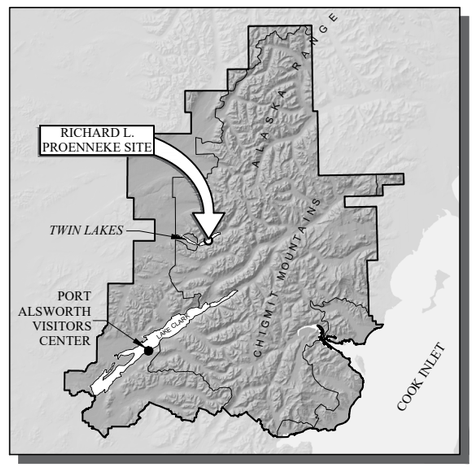
Proenneke gave the cabin to Lake Clark National Park and Preserve in 2000. It is now used by the National Park Service to interpret the wilderness values that Richard Proenneke exemplified in word and deed. The site is located in a roadless wilderness, so visitors generally arrive by float plane during the summer months.

The documentation of the Richard L. Proenneke Site was undertaken by Alaska Regional Office (ARO) and Lake Clark National Park and Preserve (LACL) staff in order to produce Historic American Buildings Survey (HABS) drawings. The project was sponsored by the ARO, NPS, Jennifer Pederson Weinberger, Cultural Resources Program Manager and LACL, NPS, Elizabeth Rupp, Cultural Resources Program Manager. Project planning was coordinated by Grant Crosby, Regional Historical Architect, ARO. The field work was undertaken and the measured drawings were produced by John Wachtel, Historical Architect, ARO, and Charleen Crespo Lacomba, NCPE intern. Large format photography was produced by Fred Hirschmann, and written history was developed by John Branson, Historian, National Park Service.

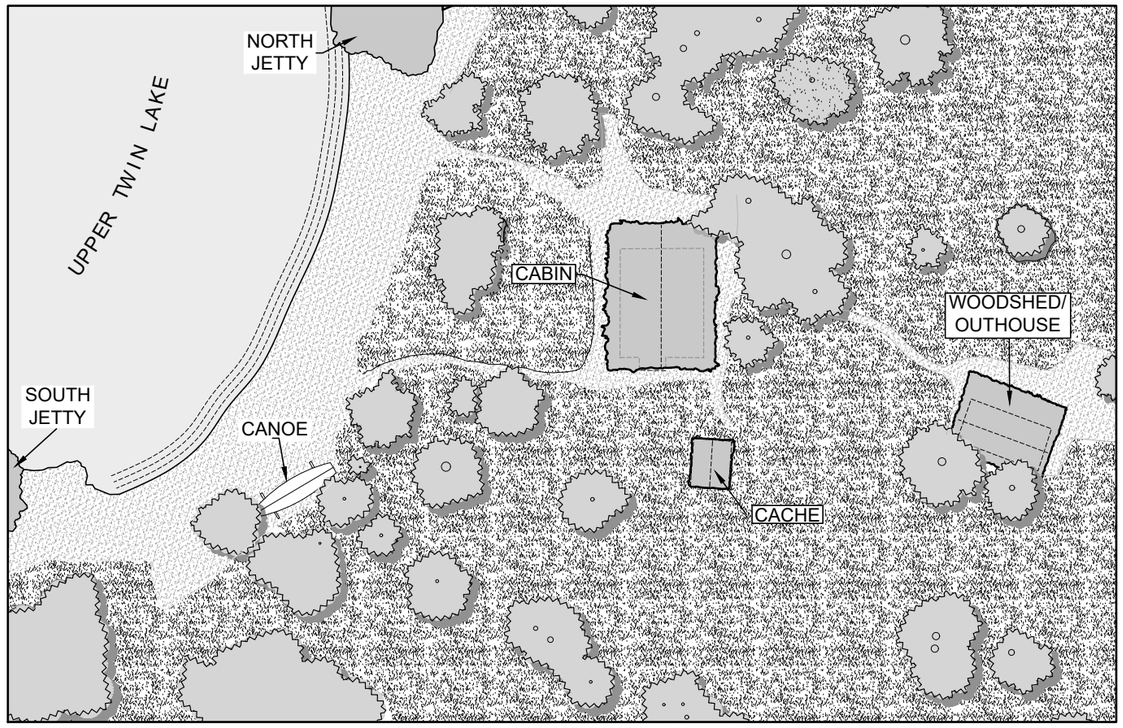
Fieldwork was conducted in the Fall of 2017 using high definition laser scanning, as well as traditional hand measuring techniques. Drawings were produced using this dataset, and completed in 2019.



STATE MAP
NOT TO SCALE



LAKE CLARK NATIONAL
PARK AND PRESERVE MAP
NOT TO SCALE



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RICHARD L. PROENNEKE SITE
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

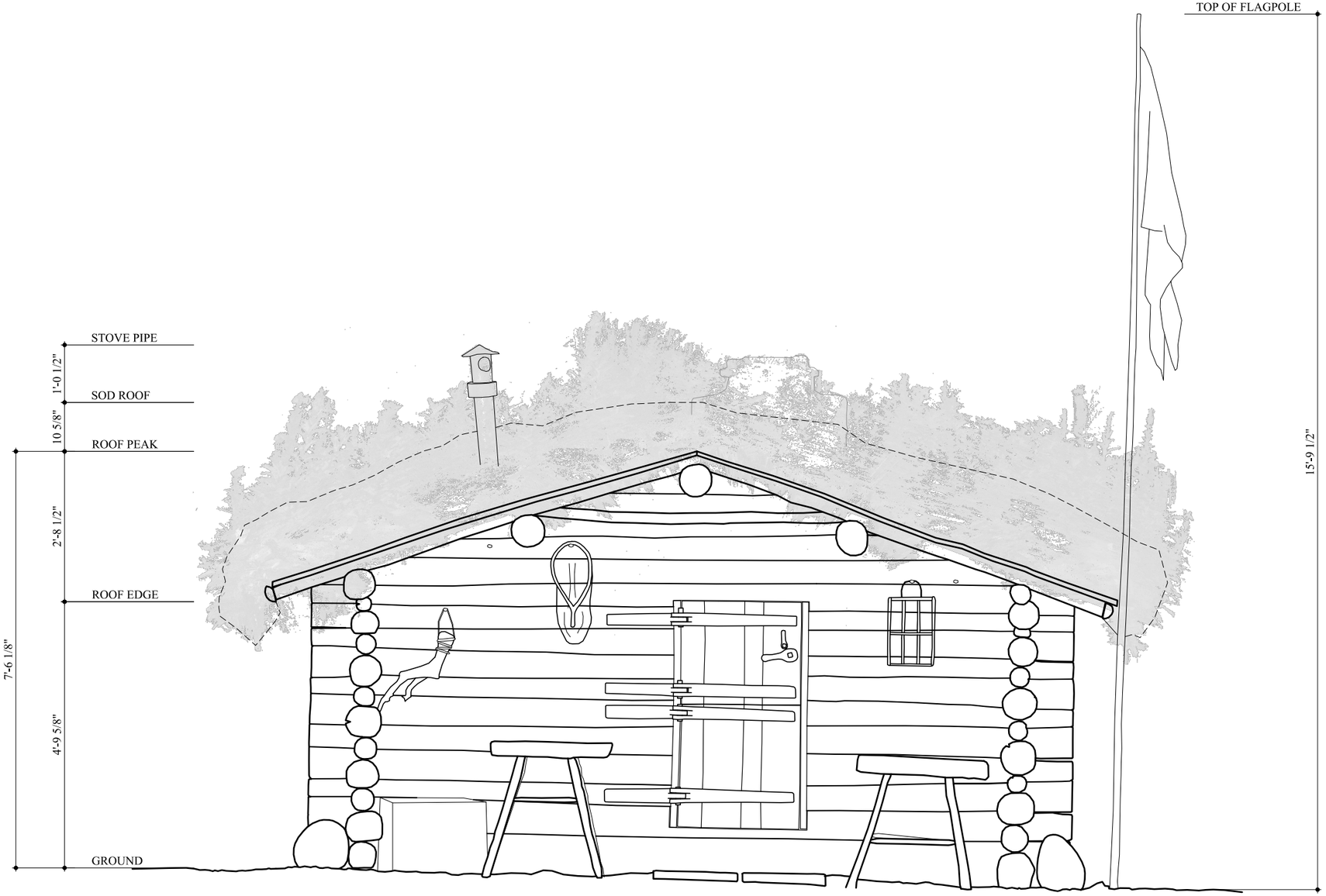
RICHARD L. PROENNEKE SITE
SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH
PORT ALSWORTH
ALASKA

SHEET 1 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
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CABIN NORTH ELEVATION

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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RICHARD L. PROENNEKE, CABIN

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH

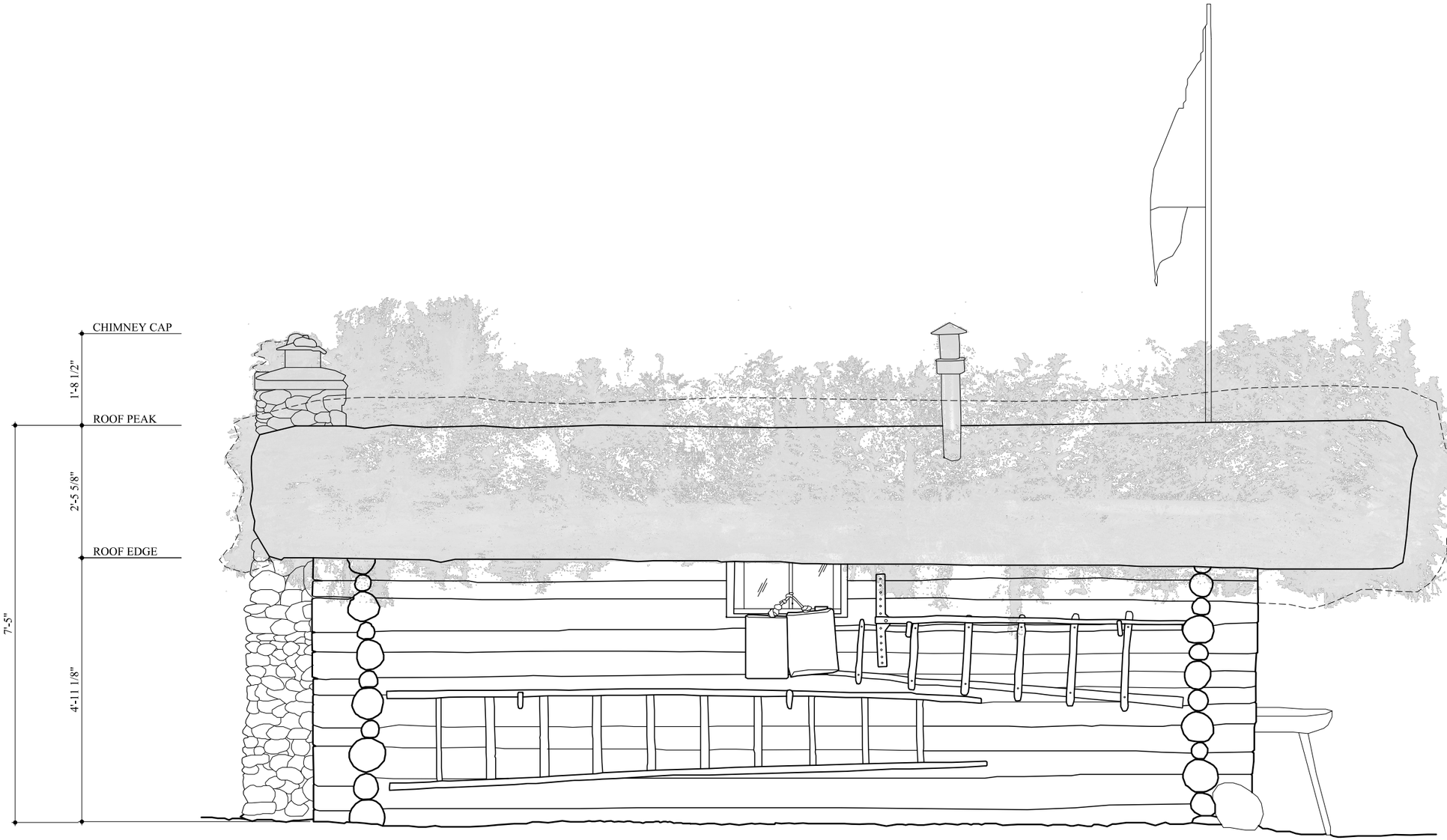
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CABIN EAST ELEVATION

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0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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RICHARD L. PROENNEKE SITE, CABIN

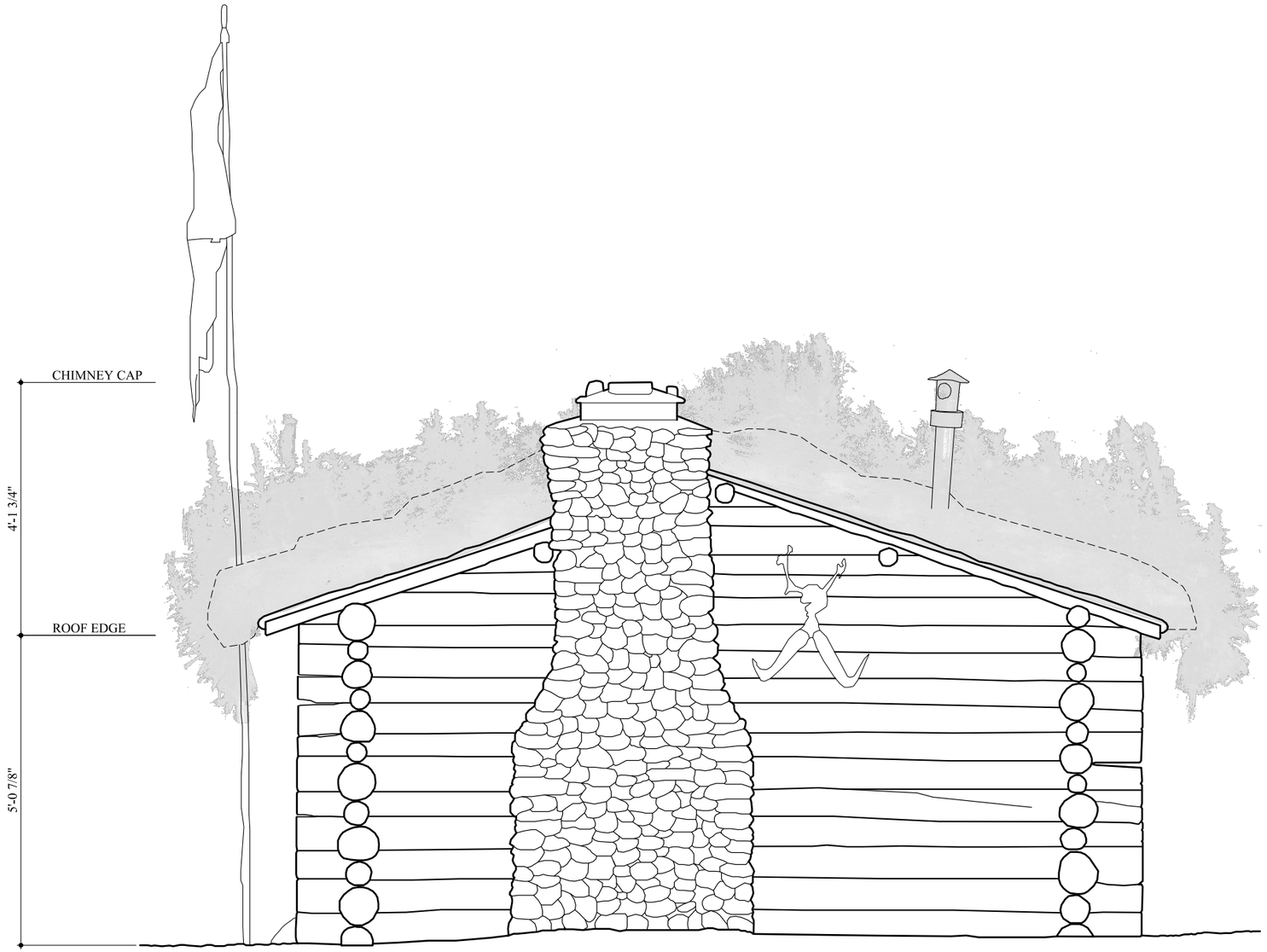
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CABIN SOUTH ELEVATION

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0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH

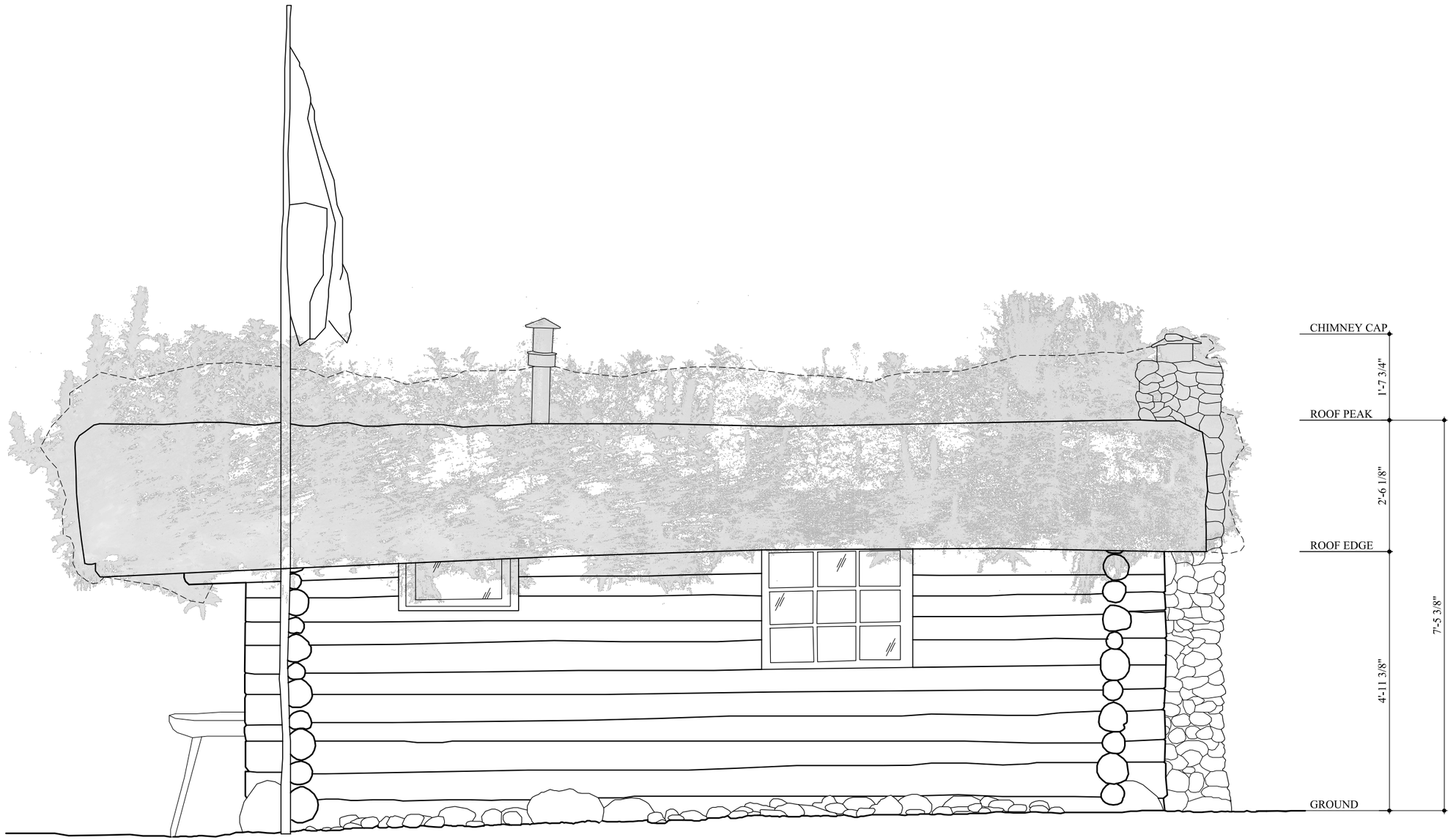
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CABIN WEST ELEVATION

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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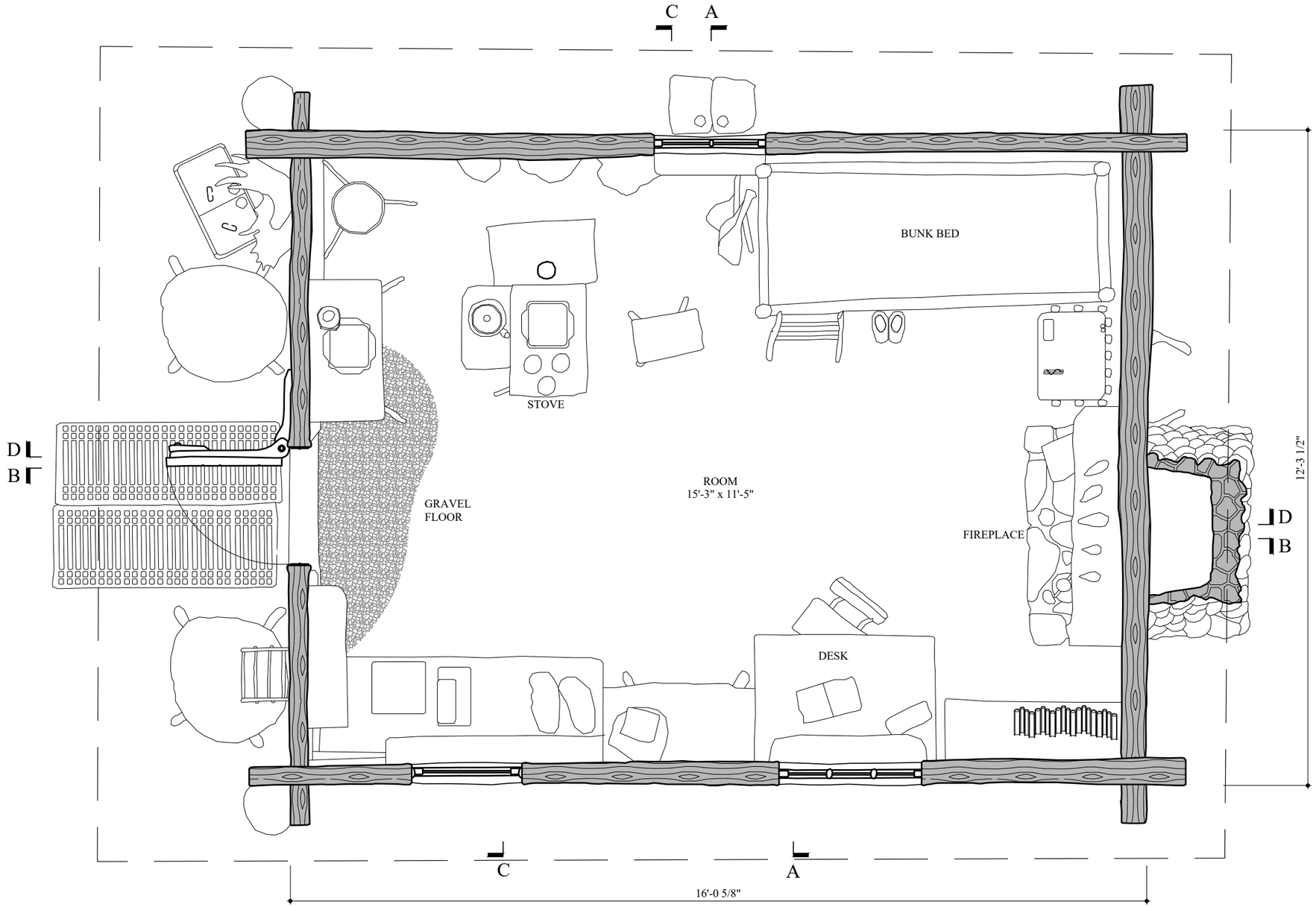
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CABIN FLOOR PLAN

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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ALASKA

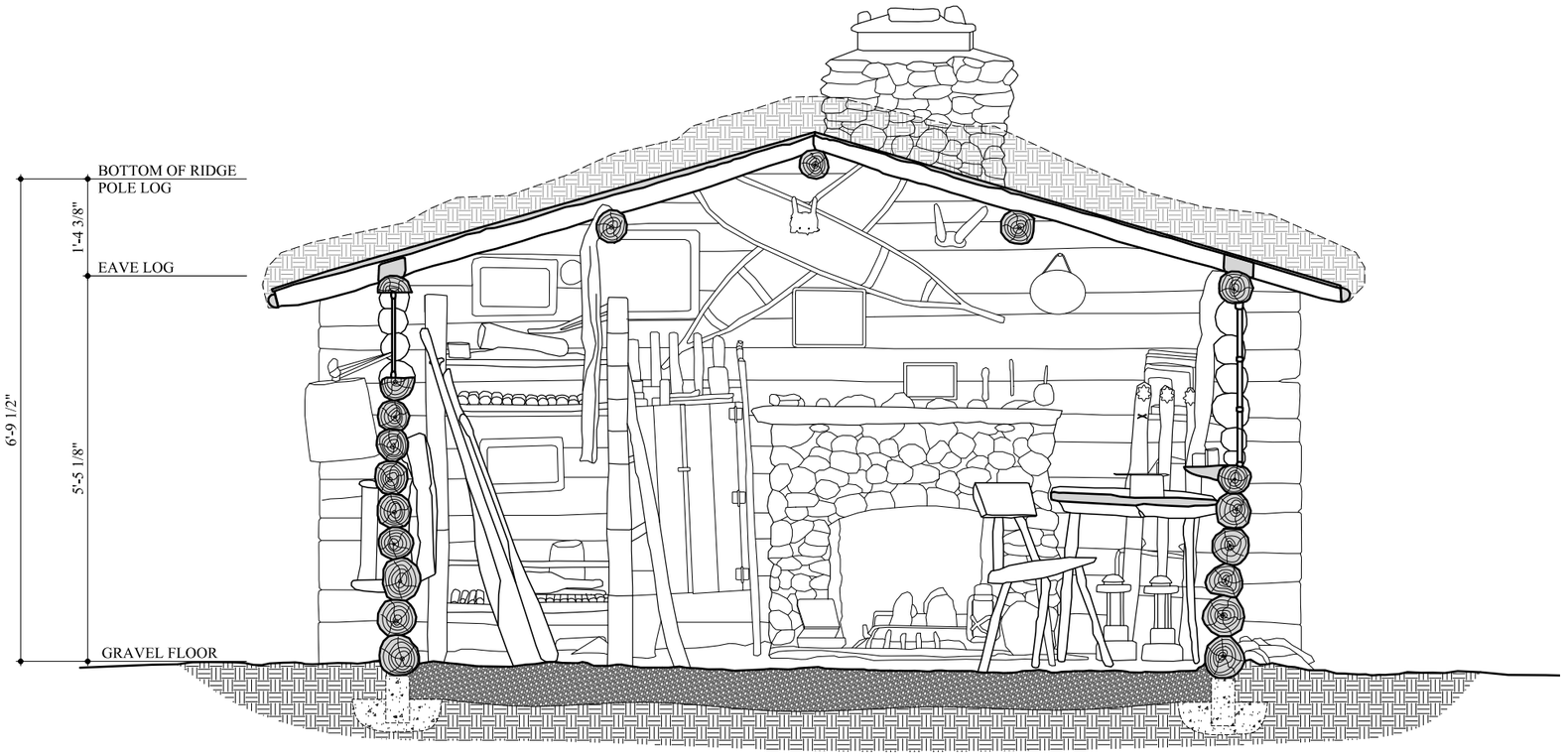
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CABIN SECTION A-A LOOKING SOUTH

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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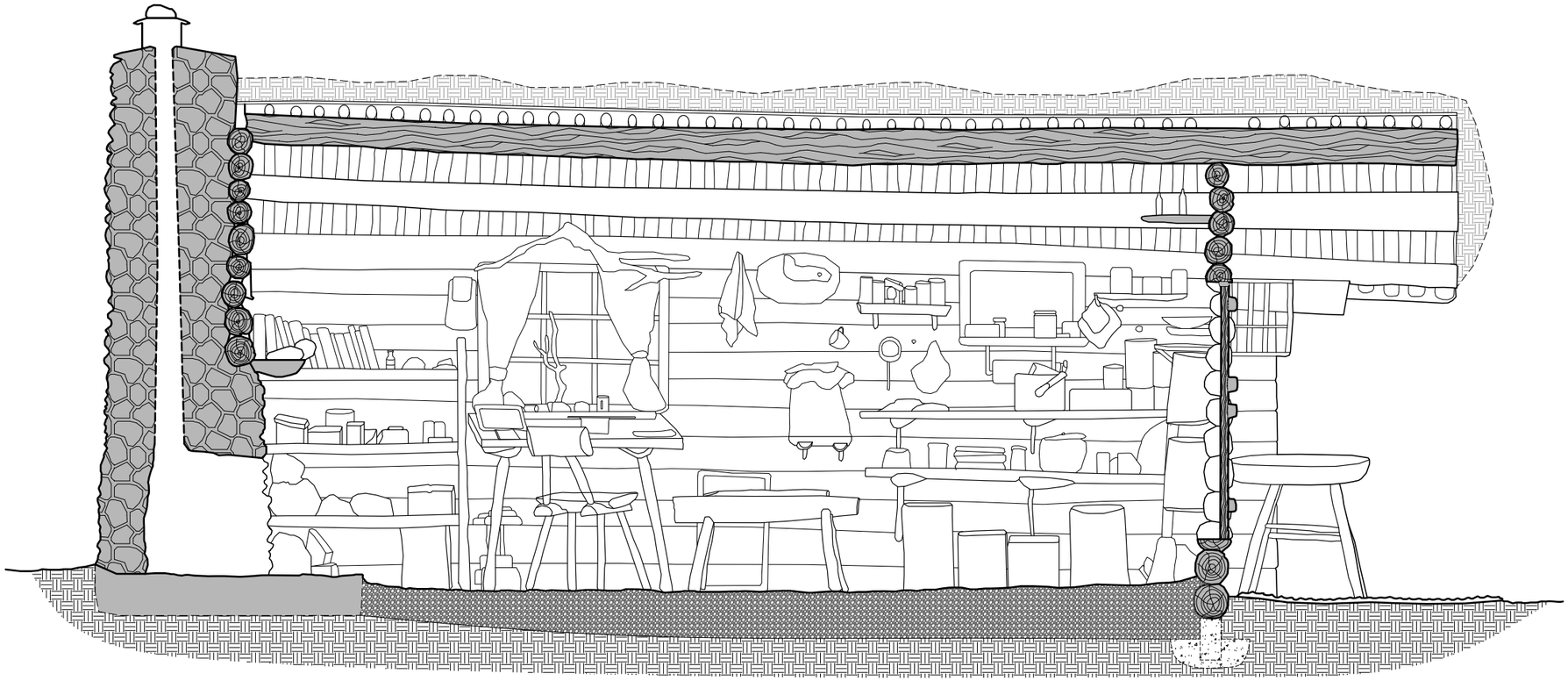
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CABIN SECTION B-B LOOKING WEST

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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UNITED STATES DEPARTMENT OF THE INTERIOR

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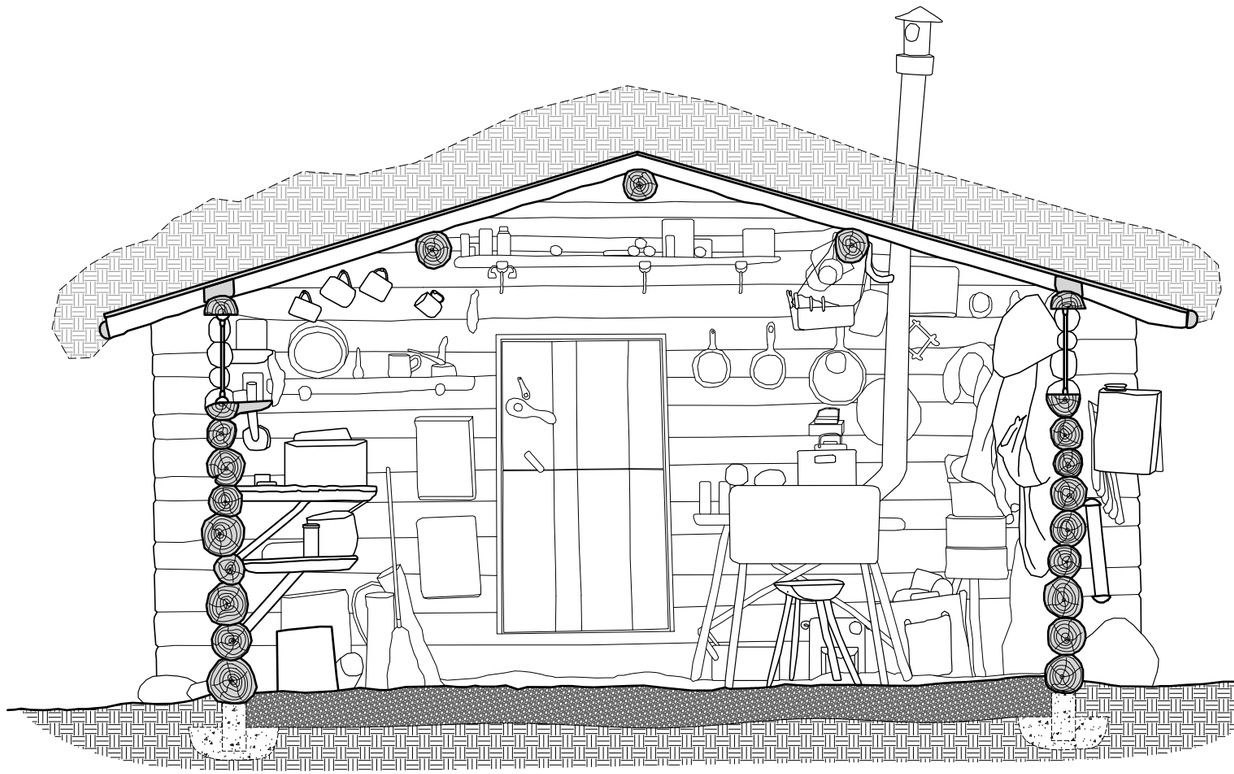
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CABIN SECTION C-C LOOKING NORTH

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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UNITED STATES DEPARTMENT OF THE INTERIOR

RICHARD L. PROENNEKE SITE, CABIN

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH

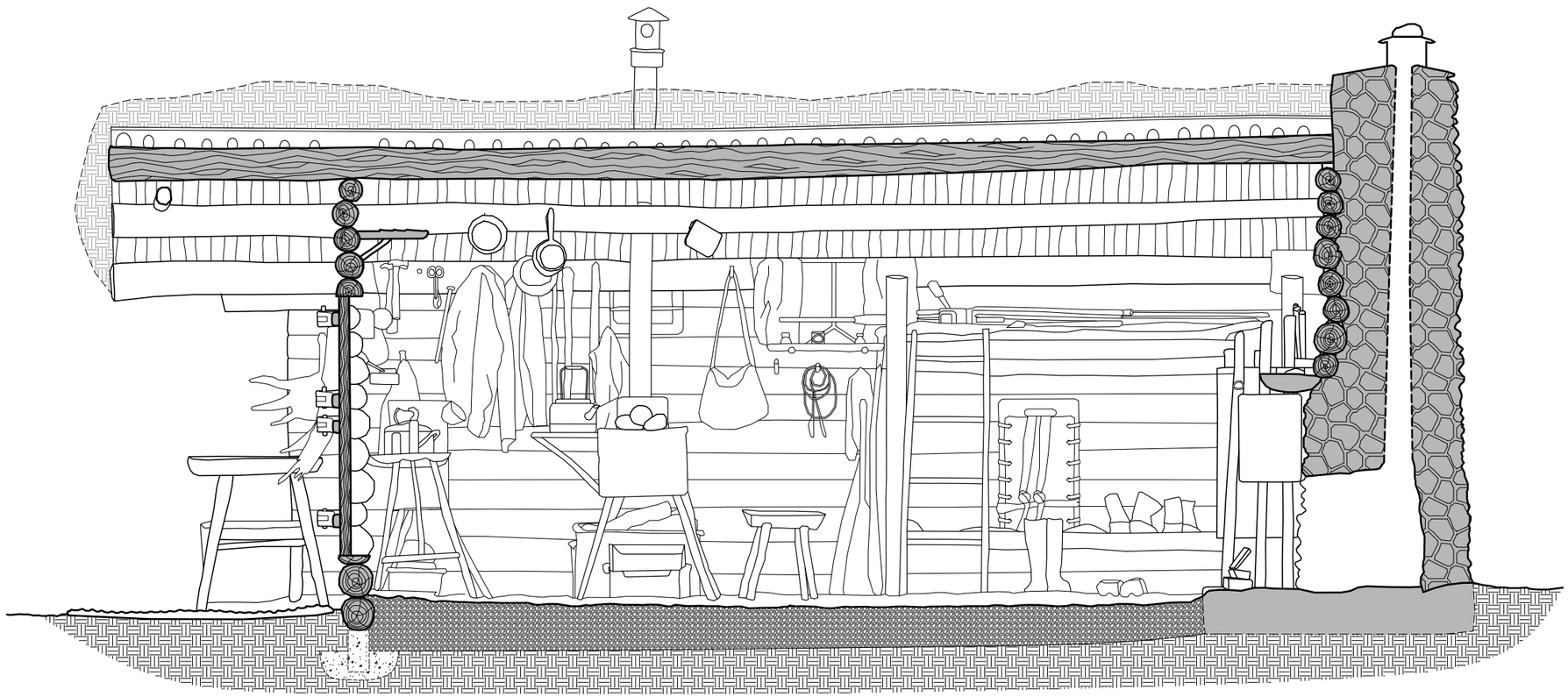
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CABIN SECTION D-D LOOKING EAST

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

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UNITED STATES DEPARTMENT OF THE INTERIOR

RICHARD L. PROENNEKE, CABIN

SOUTHEAST SHORE OF UPPER TWIN LAKE

LAKE AND PENINSULA BOROUGH

PORT ALSWORTH

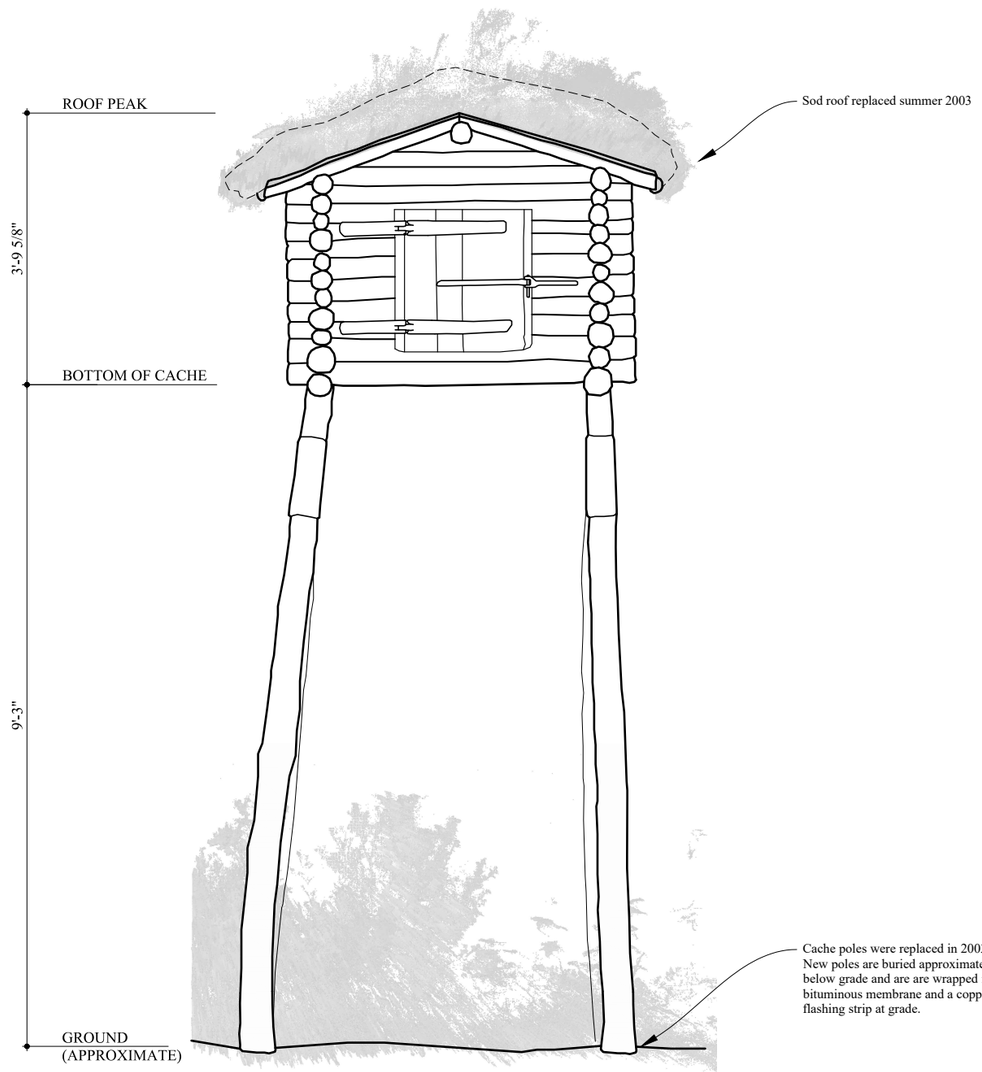
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SHEET 10 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
AK-274-A

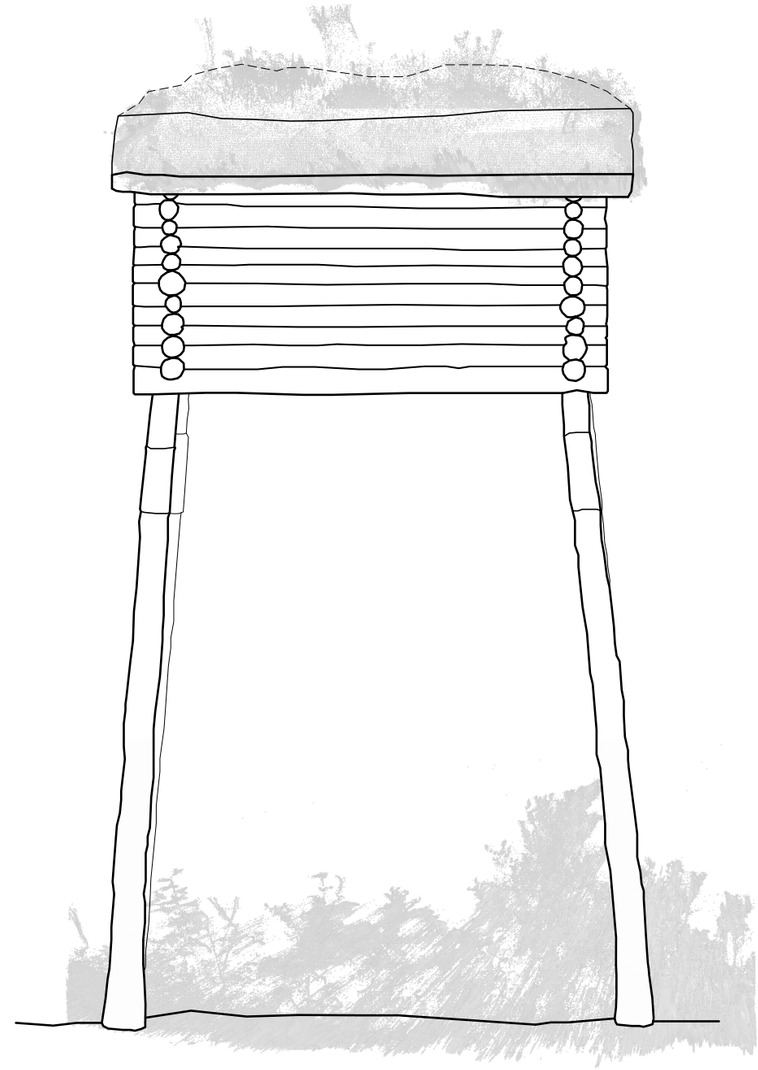
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CACHE NORTH ELEVATION

1"=1'-0" 1:12



CACHE EAST ELEVATION

1"=1'-0" 1:12





DELINEATED BY: CHARLEEN CRESPO-LACOMBA, JOHN WACHTEL

RICHARD L. PROENNEKE SITE
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

RICHARD L. PROENNEKE SITE, CACHE

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH

PORT ALSWORTH

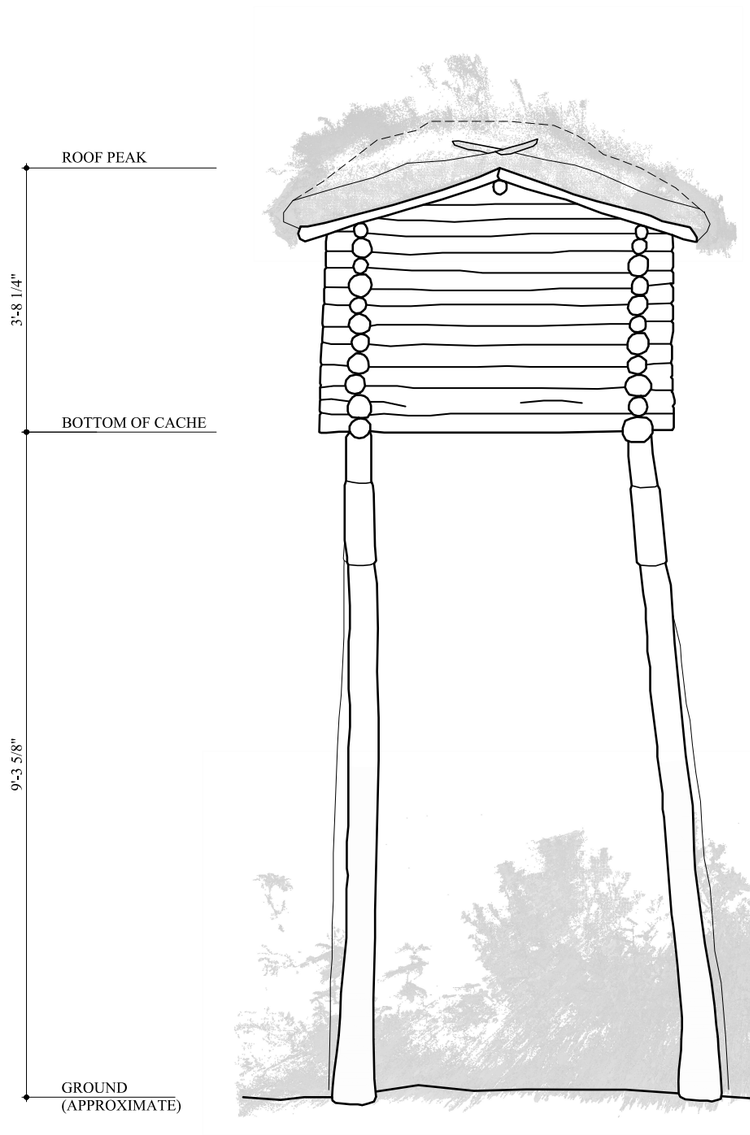
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SHEET 11 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
AK-274-B

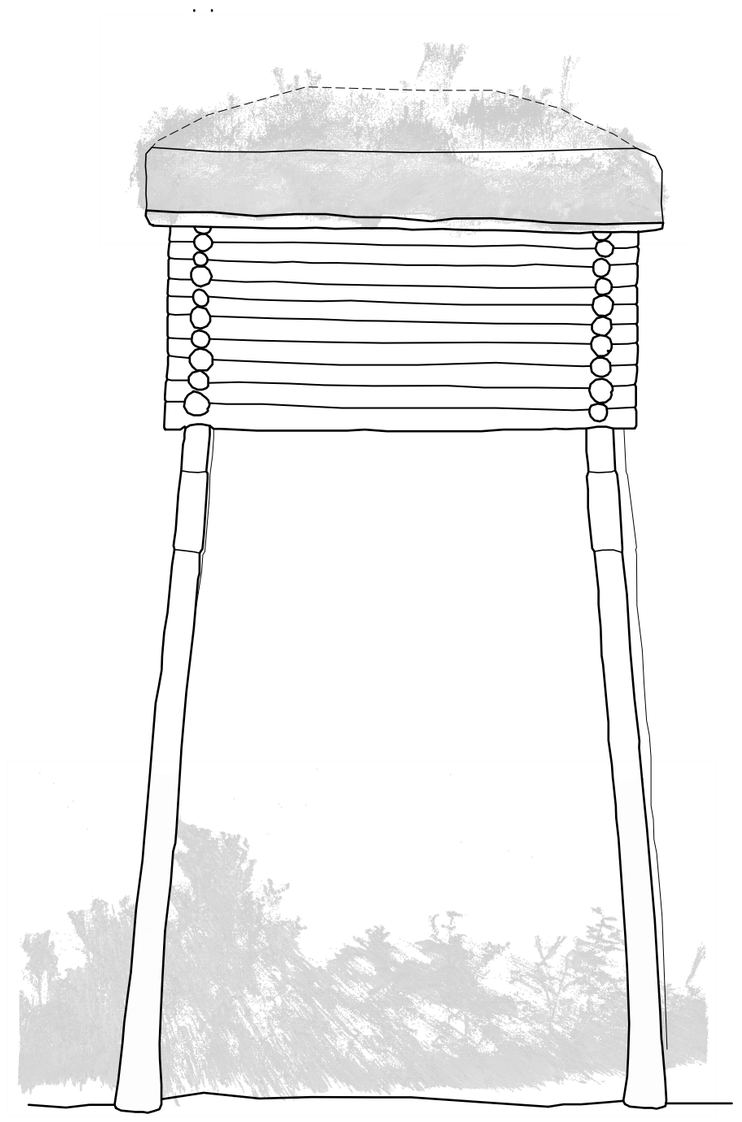
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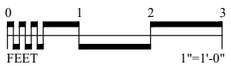
CACHE SOUTH ELEVATION

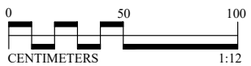
1"=1'-0" 1:12



CACHE WEST ELEVATION

1"=1'-0" 1:12





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RICHARD L. PROENNEKE SITE, CACHE

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH

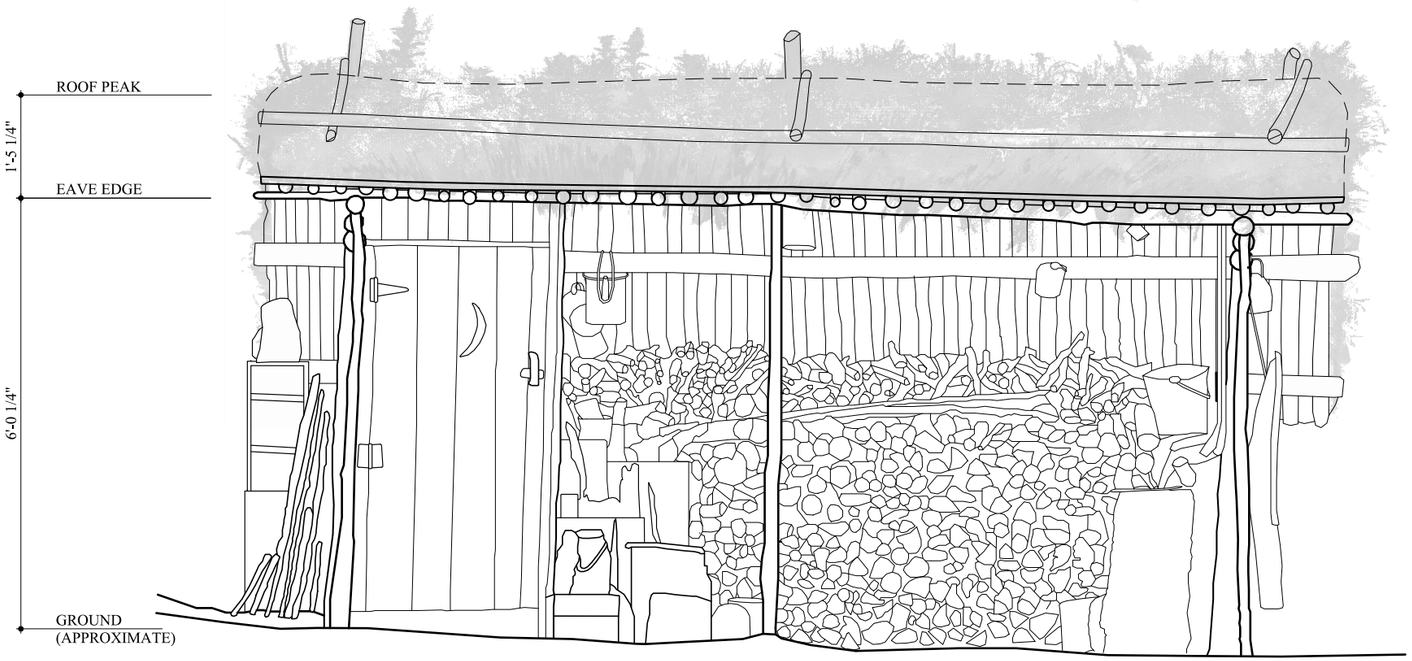
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SHEET 12 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
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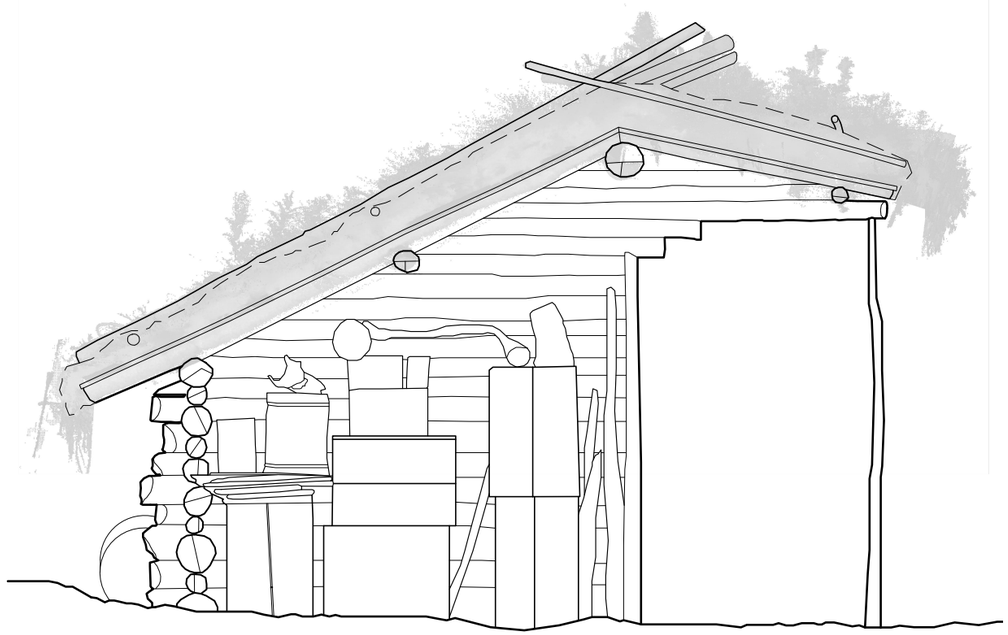


WOODSHED NORTH ELEVATION

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12



WOODSHED EAST ELEVATION

1"=1'-0" 1:12

RICHARD L. PROENNEKE SITE, WOODSHED AND OUTHOUSE

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH
ALASKA

SHEET 13 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
AK-274-C

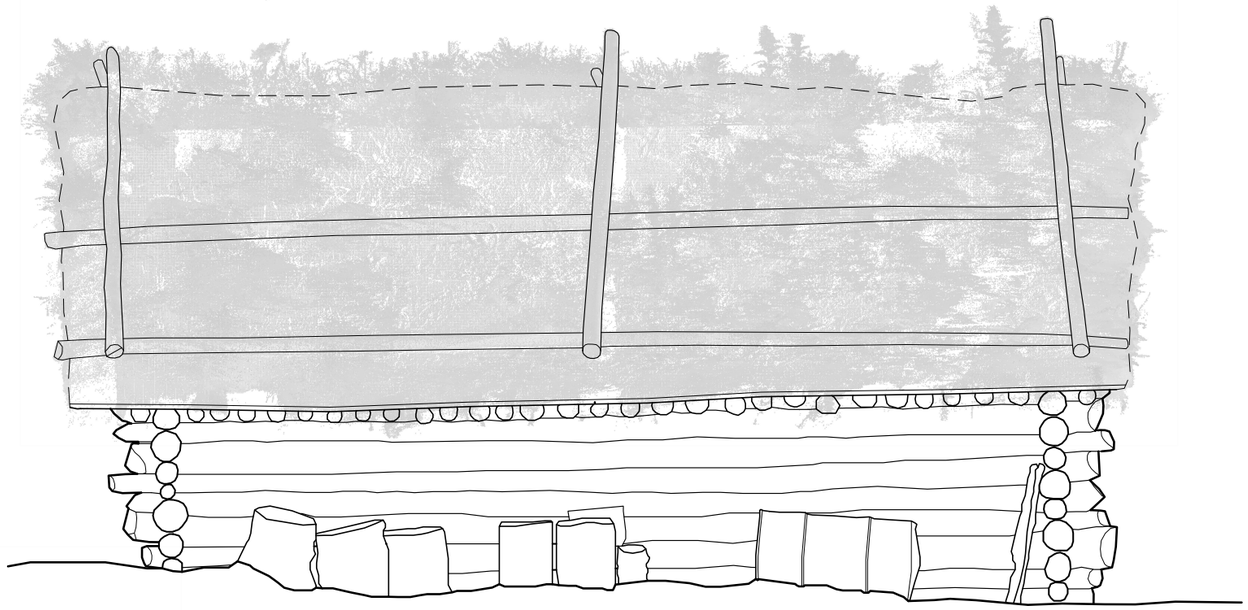
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RICHARD L. PROENNEKE SITE
RECORDING PROJECT
NATIONAL PARK SERVICE
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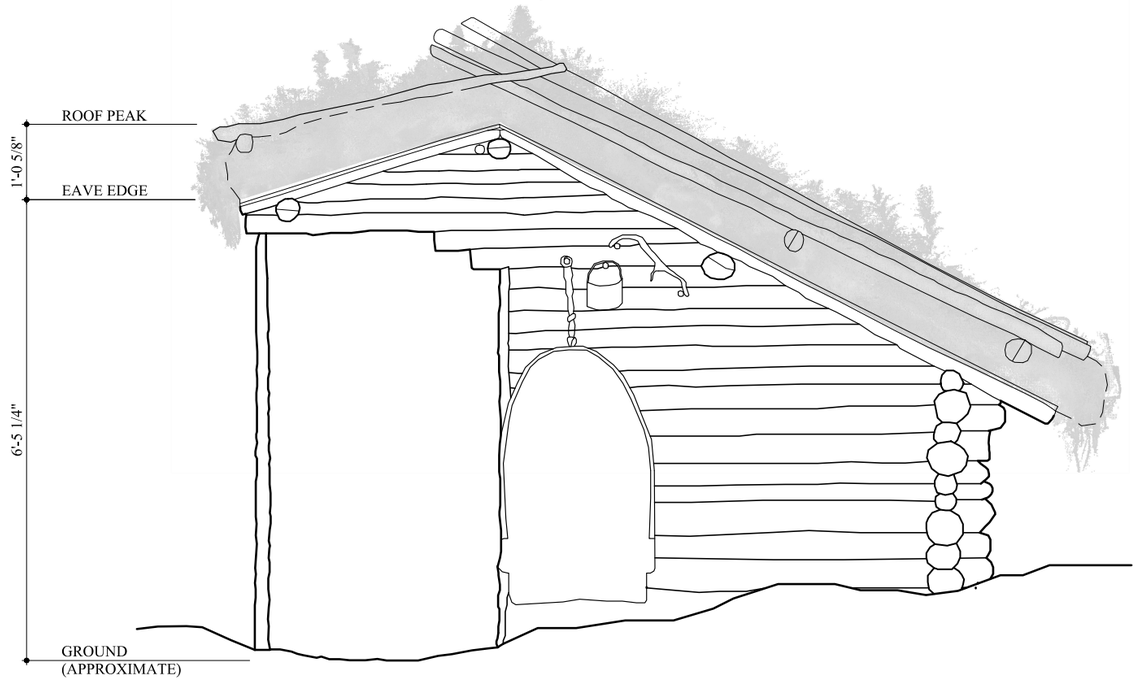
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WOODSHED SOUTH ELEVATION

1"=1'-0" 1:12



WOODSHED WEST ELEVATION

1"=1'-0" 1:12

0 1 2 3
FEET 1"=1'-0"

0 50 100
CENTIMETERS 1:12

RICHARD L. PROENNEKE SITE, WOODSHED AND OUTHOUSE

SOUTHEAST SHORE OF UPPER TWIN LAKE
LAKE AND PENINSULA BOROUGH
ALASKA

SHEET 14 OF 14

HISTORIC AMERICAN BUILDINGS SURVEY
AK-274-C

LIBRARY OF CONGRESS CONTROL NUMBER

DELINEATED BY: CHARLEEN CRESPO-LACOMBA, JOHN WACHTEL

RICHARD L. PROENNEKE SITE
RECORDING PROJECT
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

PORT ALSWORTH

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Appendix C - Recommended Products/Cutsheets

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Drill Bits & Driving Tools
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Woodworking Gifts
Gransfors Bruks Axes
Hand Planes & Accessories
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Power Tools
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Router Bits
Routers & Accessories
Rust Prevention & Lubricants
Safety Equipment
Sanding Tools
Saw Blades, Dados & Saw Accessories
SawStop Tablesaws
Scraping Tools
Scrollsaws & Accessories
Sharpening Tools
Shop Accessories
Spax Screws
Spokeshaves & Drawknives
Spray Finishing
Stationary Tools
Tablesaws
Tools By Brand
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Veneer Supplies
Woodworking Projects
Woodburning Tools
Woodturning Equipment
Woodturning Tools
Workbenches & Hardware

Renaissance Wax



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Renaissance Wax

SHARE

Highland Item # 195301

Price : $29.99

In Stock

Quantity: 1

ADD TO CART

Detailed Description

Renaissance Wax

Renaissance Wax was originally developed in association with the British Museum for restoration and protection of art treasures, and is a superb micro-crystalline polish ideal for use in the shop. Renaissance Wax is our all-time favorite coating for reducing friction, preventing rust and corrosion, and putting a shine on anything that needs it. Though it seems fabulously expensive, Renaissance Wax lasts so long and works so well that even the most frugal woodworker will find it a genuine value. It is an excellent polishing agent for any wood or metal surface, leaving an extremely hard, thin coating of astonishing durability with excellent resistance to water, alcohol and fingerprints. Used on furniture, Renaissance Wax will be the toughest wax you've ever used. In fact, it's the only wax we know of that's likely to be as durable as the finish underneath, resisting staining and marring in any household or office setting.

We use Renaissance Wax even more often on tools and jigs than on furniture. On tablesaws, bandsaws, jointers, planers, hand planes & plunge router posts it is an unbeatable corrosion inhibitor and friction reducer. It has the wonderful property of polishing metal smoother and smoother with every use—after a few years your jointer beds and plane soles will be as smooth as glass. We apply Renaissance Wax with a fine Scotch-Brite pad or 4/0 steel wood, putting it on as thinly as possible and buffing it vigorously with a soft cloth after a very short wait. It takes two or three coats to do a thorough job the first time out, but single coats thereafter will maintain a nearly perfect surface.

200mL (~6.7 fl.oz.) can

Additional Information

Renaissance Wax Material Safety Data Sheet

Product Warnings

WARNING FOR RESIDENTS OF CALIFORNIA!

This product may expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Please read our Proposition 65 warning.
For more information, see www.P65Warnings.ca.gov.

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DE NEEF® Dry Oakum Data Sheet

Product Description

DE NEEF® Dry Oakum is a 2" diameter natural jute rope comprised of 8 strands, having a twist of approximately 1-1/4 turns per foot. The loose twist is easily unraveled to allow for fitting into joints or annular spaces from 1/2" to 2". Single strands can be broken down to fit into openings smaller than 1/2". When combined with DE NEEF® PURe polyurethane grouts and water, the system swells to seal cracks, joints, and annular spaces around pipe penetrations. The system is ideal for pre-injection sealing of openings or to stop flowing water prior to final injection of chemical grout.

Product Applications

- Sealing joints and cracks
- Sealing around pipe penetrations
- Stopping flowing water
- Pre-injection surface sealing

Product Advantages

- Very absorbent natural jute
- Easy to cut to size
- No oils or tars added
- Strands easy to separate
- Conforms to any shape opening

Packaging & Handling

DE NEEF® Dry Oakum is provided in a 50 lb. box

Approximate yield:

1/2" strands = 1000 ft.
2" strands = 125 ft.

Store in dry conditions.

Installation Guidelines

Warning: Use proper tools and safe cutting techniques to prevent injury while cutting DE NEEF® Dry Oakum. Work on a flat well lighted surface and make all cutting motions away from the body. Always wear gloves, goggles and protective clothing when installing chemical grout soaked DE NEEF® Dry Oakum. Refer to the manufacturers safety instructions for the resin being used before proceeding.

Installation Instructions:

1. Clean area to be sealed prior to installing saturated oakum to facilitate a good bond to the substrate.
2. Cut DE NEEF® Dry Oakum into workable lengths. (18"-24") Properly saturated and installed oakum will create a seal to itself, so several short sections may be used.
3. Loosen fibers with the hands to enhance material absorption.
4. In a clean pail pour DE NEEF® PURe polyurethane grout and add catalyst if required. (Refer to the DE NEEF® technical department for the correct choice of chemical grout for your application.)
5. In a second pail, pour clean water to be used to initiate the chemical grout reaction.
6. Prior to saturating the DE NEEF® Dry Oakum with chemical grout, wet the substrate with water and have a method available to apply water to the surface of saturated oakum after it is installed.
7. Using a gloved hand, submerge the Dry Oakum into the pail of chemical grout.
8. Work the resin into the DE NEEF® Dry Oakum; similar to getting a sponge to soak up liquid.
9. Remove the saturated oakum from the grout pail. With a gloved hand, form a circle with the thumb and fore finger and pull the saturated oakum through the circle. Loosely grip the saturated oakum as it passes through the hand to remove excess surface resin without removing the resin that has saturated into the strand of oakum. DO NOT WRING OUT!
10. Dip the saturated oakum strip into the pail of clean water to initiate the chemical grouts reaction.
11. Immediately place the saturated / wetted strand of DE NEEF® Dry Oakum into the crack, joint or annular space. A tool such as a screwdriver, punch, or metal rod may be used to facilitate saturated oakum placement.
12. Mist or spray additional water onto the surface of the saturated oakum. Use caution only to wet the surface and not to wash the resin out of the oakum.
13. Allow the chemical grout to fully react.
14. Repeat with additional strips as required to fill the entire area to be sealed.
15. Excess grout that expands out of the sealed area may be removed by mechanical means after the grout is fully cured. Use caution not to dislodge the newly formed seal.using this product.

Health and Safety

Always use protective clothing, gloves and goggles consistent with OSHA regulations. Avoid eye and skin contact. Do not ingest or inhale fibers.

For emergencies, call CHEMTREC 1-800-424-9300.

Limitations

Wider cracks and joints sealed with chemical grout saturated dry oakum may require additional grout injection to achieve seal if excessive pressures or high water flow are present.

Physical Properties

DE NEEF® DRY OAKUM	
Color	Brown
Weight	0.4 lbs. / ft at 2" dia.

Diameter	Approx: 2" (8 strands twisted)
Conforms to:	Federal Specification HH-P-117

Note: The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

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Last Updated: 2022-08-16

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