

ROUTING COVER SHEET

Document Details	
Document Type	Grant Application
Parties	
County Contact Information	
Boulder County Legal Entity	Boulder County
Department	Parks and Open Space
Division/Program	Administration
Mailing Address	5201 St Vrain Road, Longmont, CO 80503
Contract Contact – <i>Name, email</i>	Carol Beam, cbeam@bouldercounty.org
Invoice Contact – <i>Name, email</i>	D'Ann Lambert, dlambert@bouldercounty.org
Other Party Contact Information	
Name	State Historical Fund
Mailing Address	
Contact 1 – <i>Name, title, email</i>	
Contact 2 – <i>Name, title, email</i>	
Term	
Start Date	TBD
Expiration Date	TBD
Brief Description of Work/Services Provided	
Submit grant application to complete architectural and engineering designs, and construction plans to address all work recommended in the Historic Structure Assessment to include: rehabilitation to the site, foundation structure, exterior wall, roof, chimney, exterior window and doors, interior walls and floors and electrical systems.	
Revenue Contract/Lease Details	
Amount	\$50,000
Fixed Price or Not-to-Exceed?	Fixed Price
Grant Details	
Award # (if any)	TBD
Signature Deadline	TBD
Project/Program Name	Tucker Cabin Rehabilitation Construction Documents
Project/Program Start Date	TBD
Project/Program End Date	TBD
Capital or Operating?	Capital
Grant Funding	
Amount: Federal Funds	\$0
Amount: State Funds	\$50,000
Amount: Other (specify)	\$0
Amount: Match (dollars)	\$22,215
Amount: Match (in-kind)	\$0
Total Project Budget	\$72,215
Account String	TBD
Federally Funded Grants	
Federal Program Name	NA
CFDA #	
Subrecipients	

NON-PROCUREMENT DOCUMENTS ONLY
ROUTE THROUGH DOCUSIGN – NOT ORACLE

Name(s)	NA
Services to be Provided	
Subaward Amount	
Subcontractors	
Name(s)	TBD
Services to be Provided	
Subcontract Amount	
File Net Contract Details - Details should precisely match search variables in File Net (Only required where Original Agreement is stored in File Net)	
Other Party Name	
Start Date	
End Date	
Amount	
Notes <i>Additional information not included above</i>	

DocuSign Approvals (Initials): Drop **initial tags** for each of the required approvers below

_____ **County Attorney** [ONLY FOR: Revenue Contracts, Leases, Grant Documents]

Use email: clattes@bouldercounty.org

_____ **Finance** [ONLY FOR: Leases, Grant Documents]

Use email: bmccarthy@bouldercounty.org

_____ **EO/DH** [ONLY FOR: BOCC-Signed Documents]

Use email: tglowacki@bouldercounty.org

_____ **Clerk of the BOCC** [ONLY FOR: BOCC-Signed Documents]

Use email: clacey@bouldercounty.org

Competitive Grant Application-October 2023

Organization and Contact Information

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Applicant Organization

Applicant Organization Name

County of Boulder, a body corporate and politic

Federal Tax ID Number

Please enter the 9-digit Tax ID #. Please do not include spaces or dashes.

84-6000748

First Time Applying?

Please check box below if this is the first time your organization is applying for an SHF grant

No

Black, Indigenous, People of Color (BIPOC) Information

To help us gather data about our applicants and measure our progress in our diversity, equity and inclusion work, please answer all of the following questions.

Does your organization work with or for BIPOC communities?

Yes

Does your organization's Board of Directors include people who identify as BIPOC?

Yes

Does your staff include people who identify as BIPOC?

Yes

Does your mission statement address diversity, equity and inclusion?

Yes

Applicant Organization Representative

This individual is the legal contact between the State Historical Fund and the Applicant organization, and should have the legal authority to sign contracts.

First Name

Claire

Last Name

Levy

Title

Chair, Board of County Commissioners

Mailing Address

Include floor number, suite number, etc.

PO Box 471

City

Boulder

State

CO

Zip Code

80306

Telephone

Ex. xxx-xxx-xxxx

303-441-3500

E-mail Address

clevy@bouldercounty.gov

Grant Recipient Contact

This individual will be the primary point of contact between the State Historical Fund and the grant recipient organization throughout the project. Private owners can not be the grant recipient contact.

Prefix

Ms.

Contact First Name

Carol

Contact Last Name

Beam

Title

Cultural Resource Specialist

Grant Recipient Contact's Organization

Boulder County Parks and Open Space

Mailing Address

Include floor number, suite number, etc.

5201 St. Vrain Road

City **State**

Longmont CO

Zip Code

80503

Primary Phone

Ex. xxx-xxx-xxxx

303-859-7519

E-mail Address

cbeam@bouldercounty.gov

Property and Project Information

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Property Owner Information

Does your Survey or Planning project require access to private property? If so, please attach property owner permission in a signed letter of support or on the property owner signature page attachment.

Is the Property owned by the Applicant Organization?

Yes

Legal Property Owner Name

Boulder County, a body corporate and politic

Property Owner Tax Status

Public Entity

Property Owner First Name

N/A

Property Owner Last Name

N/A

Mailing Address

Include floor number, suite number, etc.

PO 471

City **State**

Boulder CO

Zip Code

80306

Telephone

Ex. xxx-xxx-xxxx

303-441-3500

Email

commissioners@bouldercounty.org

Geographic Information

County and City where Project is located

Boulder-Nederland

In 2021, new Colorado state legislative districts were drawn. Your district may have changed, please verify! Select legislative districts where the property/resource is located. If project benefits the entire state, select "Statewide". Don't know your legislative districts? Click [here](#).

Colorado State Senate District

S-15

Colorado State House District

R-49

US Representative District

US-02

Property Information

Property Street Address

1001 Caribou Road

Property City **State**

Nederland CO

Zip Code

80466

Property Legal Description

Contact your County Assessor or visit <http://publicrecords.netronline.com/state/CO/>.

SW4 NW4 LESS 1/4 MIN & N2 SW4 LESS 1/4 MIN 14-1S-73 120 AC M/L & S2 NE4 & SE4 NW4 & NE4 SE4 & NE4SW4 LESS 1/5 MIN 15-1S-73 200 AC M/L ID 24357 COMBINED HERE

Project Information

Project Title

Please give us a brief title that explains what you want to do. Examples are: Interior Restoration, Exterior Rehabilitation, Cultural Resource Survey, Construction Documents, etc.

Tucker Cabin Rehabilitation Construction Documents

Brief Summary of Project (150 words or less)

Expanding upon the Project Title, please summarize the proposed project. Please include the applicant organization, property name, and a brief summary of the proposed work.

Boulder County Parks and Open Space (BCPOS) is submitting a grant request to complete a set of construction documents and cost estimate to plan for the future rehabilitation of the Tucker Ranch cabin outside the Town of Nederland in unincorporated Boulder County. The 1871 cabin is individually listed as a Boulder County local landmark for its contributions to the development of early 20th century agriculture and mining, and named after its builder, Alfred Tucker. The cabin is the centerpiece of the property and retains its historic physical integrity that are associated with Alfred Tucker and his descendants.

Revised Application

Is this a revised application for this scope of work?

Indicate if you are reapplying for all or any part of a previously declined grant.

No

If this is a revised application, please explain how this application addresses the previous reviewers' concerns and include the declined SHF project number. (500 words or less)

N/A

Diversity, Equity, and Inclusion

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Diversity, Equity, and Inclusion (0-10 points)

The State Historical Fund is committed to diversity, equity, and inclusion rooted in [History Colorado's Anti-racism Grounding Virtues](#). One of our goals is to seek racial equity within our funding by providing grants that clearly benefit Black, Indigenous, and People of Color (BIPOC) communities. Addressing structural inequities and

amplifying voices that have not traditionally been heard, particularly those of underrepresented communities.

A BIPOC project is one that significantly benefits (FOR) AND involves (BY/LED) one or more BIPOC communities. Click on link for more information.

- To be eligible for the BIPOC cash match and the points in this section, your project must qualify as a BIPOC Project **according to the two criteria below.**
- For examples of how a project can benefit and involve BIPOC communities, click [here](#).
- If you are unsure if your project is a BIPOC project, see the two criteria below or call us at 303-866-2825.

SHF BIPOC Criteria

Criteria 1 - APPLICANT ENTITY (must answer Yes to at least one statement)

- **Identifies as a BIPOC organization or primarily serves the BIPOC community.**

Or

- **the property is owned by a BIPOC organization or BIPOC individual/private owner.**

Or

- **the BIPOC community is involved in project planning and/or will be involved during the project.**

Criteria 2 - (must answer Yes to both of these statements)

- The completed project will directly benefit the BIPOC community.
- Two or more letters of support from that community are included in the application.

If you can respond “Yes” to both criteria,

- SHF invites you to answer the three questions that follow, and you are eligible to request the lower BIPOC Cash Match.

- Please note, should reviewers determine your project does not satisfy the two criteria, these points will not be counted and the lower BIPOC cash match, if requested, may be denied.

If the answer is “No” to either criterion, this section of questions is not eligible for points.

- Skip the questions that follow and continue on to the Project Team tab.
- Please tell us about additional project public benefits (ADA, LGBTQ+, religious minorities, etc.) in either of the upcoming Resource Significance or Public Benefit sections.

I confirm that my project meets the two criteria listed above.

If your answer is "No", skip the 3 questions below.

No

Diversity, Equity, and Inclusion Questions:

1. How has and/or how will the BIPOC community be involved in this project? (500 words or less)

Include BIPOC partnerships, consultation, reference letters of support, etc.

2. Which communities will benefit from the project and/or will be involved?

Select all that apply

Prefer to Self-describe

3. How will BIPOC communities directly benefit from the completed project? (500 words or less)

Project Team

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Project Team (0-10 points) (1000 words or less)

Provide the following information, as it may apply to your project:

- 1. Briefly describe similar projects or grants the applicant has completed or managed.**
- 2. List your project team members and include:**
 - Each person's role and responsibilities for this project.**
 - Their qualifications that are applicable to this project.**
 - Any other relevant experience with historic preservation, and/or grant finance and management, etc.**

To date, Boulder County Parks and Open Space (BCPOS) has successfully completed 27 State Historical Fund (SHF) grants since 1993. Previously completed State Historical Fund grant projects range from historical and architectural surveys, historic structure assessments, National Register of Historic Places Multiple Property Documentation Forms, National Register of Historic Places nomination, historic contexts, and development grants that assisted in the rehabilitation of several significant historic buildings that include Cardinal Mill, Blue Jay Mine, and the Wencel Barn.

Although BCPOS has not previously applied for a construction documents type of grant, the department is an experienced grant applicant with a successful completion record as evidenced with the list of grants provided in the previous paragraph.

Carol Beam, BCPOS Cultural Resource Specialist, will serve as the grant recipient contact and the project manager. She will be responsible for managing all aspects of the project between History Colorado, BCPOS, and its subcontractor to ensure a successful project. Carol has been with BCPOS since 2003 and has completed 32 historic preservation or cultural resource related grant projects from various funding sources that include the State Historical Fund. She has previously served as the grant recipient contact and project manager roles for SHF projects. Carol meets the Secretary of the Interior's Professional Qualification Standards for History and Architectural History.

Supporting BCPOS staff include the services of D'Ann Lambert, Grant Coordinator, who will serve as the project's grant financial administrator. She will be responsible to setup the project's information in the County's Oracle financial system database, request purchase orders, and submit contractor invoices for payment. D'Ann has been with the county 4 years and coordinates the departments many grant applications from a diversity of funding agencies that include FEMA and multiple Colorado agencies including Great Outdoors Colorado, Parks and Wildlife, Natural Resources, Agriculture and Forest Service. D'Ann is an experienced grant coordinator with all types and sizes of grant projects that extend into the millions of dollars with complex grant requirements.

Renee Bookless, Contract Administrator, will serve as the project's subcontractor administrator to ensure all County purchasing and contracting policies are met during the contractor selection process and contracting period. Renee has been with BCPOS for over 30 years and managed many small and large contracts for the department. Renee is highly skilled in Boulder County's purchasing policy requirements to ensure fair, transparent, and competitive bidding process.

Since both D'Ann and Renee's roles for this project are minor, their resumes are not provided as part of the grant application.

BCPOS is committed to a fair, transparent, and competitive bidding process for all its contracted service projects like the Tucker Ranch Cabin construction documents grant project. If this grant application is approved, BCPOS will develop and release a Request for Proposals (RFP) in order to select a qualified architect to complete the project and ensure the best possible value for BCPOS and the public it serves. All entities contacted as part of the RFP process will be licensed architects in the State of Colorado, able to interpret and apply the Secretary of the Interior Standards for the Treatment of Historic Properties to the

project and demonstrate previous experience with similar historic preservation projects to ensure a successful project. Unqualified bidders will not be solicited. With its numerous successfully completed other grant funded projects, BCPOS has demonstrated its ability to hire qualified professionals for the project that will provide a quality product and the approval of the State Historical Fund.

Resource Description & Significance

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Resource Description and Significance (0-10 points)

Historic Designation

Select all levels of designation that apply to the property. Please note that designation is required for all Acquisition & Development grant projects.

County Designated

Designation Area

If the property is historically designated, indicate the general boundary of the designation (i.e., the building footprint only, the building and surrounding property, or if the building is contributing to a historic district). If you are unsure of the designation boundary, please contact State Historical Fund staff at 303-866-2825. NOTE: SHF cannot fund work outside the designation boundary.

Building and Surrounding Area

Resource Historic District Name

Please list the name of the historic district. If this does not apply to your project, please fill in with N/A.

N/A

Resource Historic Name

Property historic name can be found on the state or national nomination form or certification of local designation.

Tucker Ranch Cabin

Resource Site Number (e.g., 5DV.1234)

If you do not know the Smithsonian site number for your property, contact the Cultural Resource Support Services office at 303-866-3392. If this does not apply to your project, please fill in with N/A.

5BL.14491

Resource Period of Significance

Provide period(s) of significance as listed in your historic designation. NOTE: Some older or local nominations may not include a period of significance, type N/A if this does not apply.

1871 (architecture); 1872-1921 (agriculture)

Resource Description and Significance (500 words or less)

Provide the following information, as it may apply to your project:

1. Briefly describe the prehistory or history of the resource, survey area or archaeological site. If applicable, describe how the resource represents a historically excluded history or community. (For example, LGBTQ+, women's history, religious minorities, etc.)
2. In your own words, briefly explain why the resource, survey area or archaeological site is important. (For example, the importance to a community, architectural or archaeological value).

3. Briefly describe the appearance of the resource and how it has changed over time (refer to construction history on survey/site forms or nominations, if available).

The Tucker Ranch cabin is an 1871 building constructed by Alfred Tucker. Tucker was an early arrival on Indigenous land that was later to become the State of Colorado. Tucker arrived in Denver City in May 1859 and quickly established himself as a landholder, businessman, toll roader operator, rancher, and miner.

As Tucker's landholdings increased in Jefferson, Larimer, and Boulder counties, he constructed the cabin on 160 acres outside the new mining settlement that was to eventually to become the Town of Nederland. What is unique about Tucker's property is that he envisioned its future as a cooperative community where there was space for public buildings and grounds, as well as donating a lot to anyone willing to erect a frame building. Tucker named his utopian community Keysport. No physical evidence remains of any of the buildings that date to the Keysport time period, except for the cabin. Records indicate Tucker's dream for Keysport never fully materialized, and like many other early settlements conceived during the 19th century mining boom, faded away almost as quickly as it began. But this story is a very interesting part of the history that is reflected by the presence of the cabin.

After Keysport failed, the property and cabin returned to being used for ranching purposes by the Tucker family. After the passing of Tucker in 1880, and his wife Margaret in 1905, their only son, Thomas, continued his father's ranching tradition and became a well-known successful rancher running the family's multiple ranch properties until his death in 1921. Other Tucker family members continued to operate the ranch until the 1960s.

The small cabin is a rectangular plan, one-and-one-half-story, side-gabled-roof building that faces south. The cabin features a fieldstone foundation, wood frame construction and brown painted horizontal wood siding. The wood windows appear to be original to the cabin. Character defining features of the cabin include the large fieldstone and poured concrete porch that spans the entire width of the cabin's south elevation and wraps around to the east and west elevations, the large exterior fieldstone chimney on the south elevation, the window's wood shutters, the wood doors, the shed roof dormers, wood shingle roof, and historic painted graffiti on the interior stairwell with names and sayings most likely from the early 20th century.

No historic or photographic documentation prior to 1949 exists regarding the construction of the cabin or alterations. Given the appearance of the building, it is possible that the cabin originally consisted of one room on each floor, with the north wing and west wing added at unknown later dates.

Remarkably, the Tucker Ranch cabin retains a high degree of historic physical integrity from its two periods of significance of 1871 (architecture) and 1872-1921 (agriculture). What is even more remarkable is that descendants of Alfred and Margaret Tucker held onto the property for 149 years before selling the property to Boulder County in 2020. Boulder County quickly recognized the property's historic significance and proceeded with local historic landmark designation in 2021.

Scope of Work/Budget

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Scope of Work and Budget (0-15 points)

For all boxes that require a cash amount, use numerals only. Do not include decimal points, commas, or dollar signs. Provide a clear list of tasks and reasonable costs.

All of the boxes may not apply to your project.

Task A

Title

Site visits and field documentation

Description

This task will consist of the architect site visits to complete field documentation and reporting in order to proceed toward preparing the draft construction documents in the subsequent steps.

\$ Amount

4800

Task B

Title

Draft construction documents preparation

Description

This task will consist of the architect coordinating with the engineering team members to draft the construction documents that meet the Secretary of the Interior's Standards for Rehabilitation. This is the treatment that was recommended in the historic structure assessment.

\$ Amount

13500

Task C

Title

Final construction documents preparation

Description

This task will consist of the architect coordinating with the engineering team members to revise the draft construction documents based upon Boulder County Parks and Open Space and State Historical Fund staff comments.

\$ Amount

8500

Task D

Title

Electrical engineering consultant

Description

This task will consist of an electrical engineer completing site visits to complete field documentation and reporting in order to formulate strategies for the electrical system design in the construction documents.

\$ Amount

8600

Task E

Title

Structural engineering consultant

Description

This task will consist of a structural engineer completing site visits to complete field documentation on the current structural condition of the cabin in order to formulate strategies for repair on the construction documents structural sheets.

\$ Amount

21000

Task F

Title

Geotechnical engineering report

Description

This task will consist of a geotechnical engineer site visits and soil testing to determine the soil quality and its various characteristics in order to assist in the production of the structural construction drawings that can support the needs of the cabin. The geotechnical report will summarize key information about the ground conditions around the cabin and include design advice and recommendations relating to those conditions.

\$ Amount

5500

Task G

Title

Construction contractor assistance/cost estimate

Description

The task will include the services of a construction contractor to complete the selective limited removal of several targeted concealed finishes and features of the cabin under the supervision of the architect and structural engineer. The task will also include a cost estimate based upon the work detailed in the final construction documents and be useful for future budget planning purposes.

Every attempt will be made to salvage any historic materials for future reuse during the selected removal of materials such as siding, interior wallboard or wood trim.

\$ Amount

3500

Task H

Title

Reimbursable expenses

Description

Reproduction and shipping costs for 2 copies of the draft and final construction documents to both State Historical Fund and Boulder County Parks and Open Space. Travel costs will be billed at state mileage rate allowance.

\$ Amount

250

Task I

Title

Description

\$ Amount

Scope

Subtotal

Click on calculator

65650

For construction projects only.

General Conditions

\$ Amount

Permits

\$ Amount

Bonding

\$ Amount

Overhead and Profit

\$ Amount

Scope Total

Click on calculator

65650

Architectural/Engineering Fees (For construction projects only)

Calculation Details

N/A

\$ Amount

Archaeological Monitoring

*Only for ground-disturbing construction projects

On August 7, 2023 Boulder County Parks and Open Space reached out to Eric McCann, State Historical Fund Archaeology Specialist, to inquire about an archaeological monitoring waiver due to the minimal ground disturbance for a geotechnical boring that is part of this project. The 2023 State Historical Fund grants guidebook indicates this type of small-small geotechnical boring is qualified to receive a waiver. The archaeological monitoring waiver was granted on August 14, 2023 with the condition that the BCPOS project manager be onsite during the minimal ground disturbance for the project.

\$ Amount

Project Subtotal

Click on calculator

65650

Grant Administration & Indirect Costs

Calculation Details

Must not exceed 15% of project subtotal

Boulder County Parks and Open Space will not be seeking reimbursement for grant administration costs.

\$ Amount

0

Contingency

\$ Amount

6565

Project Total

Click on calculator

72215.00

Grant Request

\$ Amount

50000

Grant Request Percentage of Project Total

Click on calculator

69.24%

Cash Match

If no cash match, enter a zero.

\$ Amount

22215

Cash Match Percentage of Project Total

Click on calculator

30.76%

Scope of Work and Budget Comments (200 words or less)

Boulder County Parks and Open Space has not selected a contractor for this project since it is required to follow Boulder County's purchasing guidelines to ensure a fair, transparent and competitive bidding process in order to obtain the best project value from qualified contractors who have previous historic preservation experience.

A 10% contingency has been added to the project budget.

Grant Request + Cash Match = Project Total

Please verify that your grant request and cash match percentages add up to 100%

Cash Match Requirements

In alignment with our Diversity, Equity, and Inclusion work, lower cash match requirements are available for projects that directly support or focus on BIPOC communities.

Questions? Please refer to the [State Historical Fund Program Guidebook](#), under Grant Programs (page 8).

Cash Match for BIPOC Projects

If your project qualifies as a BIPOC Project and your project total allows, you are eligible to request the lower BIPOC cash match (0% for nonprofit and public owners, 10% for private owners). The scope of work above must include this lower cash match, and two letters of support must be attached as the “BIPOC Letters of Support” at the end of the application.

Indicate if you are requesting a waiver for the Cash Match requirement

Waiver Justification (150 words or less)

If you are unable to provide the minimum cash match required (25% of the project total for nonprofit or public owners or 50% of the project total for private owners; BIPOC projects: 0% for nonprofit/public owners or 10% for private owners), explain why the minimum cannot be met and the efforts your organization made to find funds or other community resources.

N/A

Project Description

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Project Description (0-20 points) (1500 words or less)

Verify that the project description correlates directly with the scope of work. If you listed an activity or task in the scope, describe it in this section.

Your description should make clear that your project meets the [Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation](#) and/or the [Colorado Cultural Resource Survey Manual](#).

Provide the following information, as it may apply to your project:

1. List the steps you completed that led to this grant project.
2. Clearly explain the proposed project:
 - Describe the tasks that will be completed.
 - Explain how the components of the project will be executed.
 - Discuss why the specific treatments, strategies, or methods were chosen.
3. Briefly list future phases or programming directly related to this project.
4. Describe how you will financially commit to this project or resource going forward.
5. Depending on your type of project, attach photos that:

- Illustrate the condition of the resource(s), including overall and detailed views; or
- Illustrate a representative sample of the resource(s) to be researched; or
- Illustrate potential outcomes of the project; and
- Include captions.

6. If previous planning documents exist for this project, attach the most recent and relevant sections of those documents that support this proposed project (e.g., historic structure assessment, construction documents, survey forms, reports).

Boulder County Parks & Open Space (BCPOS) purchased the 324-acre Tucker Ranch property in October 2020 with the express intent to preserve the property as open space and rehabilitate the historic cabin for future public benefit. As part of that commitment to preserve the cabin, BCPOS nominated and received local historic landmark designation for the cabin in 2021. With the official recognition of the cabin completed, BCPOS next applied for and received a State Historical Fund Historic Structure Assessment Grant in June 2022. BCPOS worked with Form+Works Design Group to build a team of professionals to complete the project and produce a report that would serve as the baseline document for the cabin's future phased rehabilitation. The Historic Structure Assessment was successfully completed and approved by the State Historical Fund in February 2023. Pertinent Historic Structure Assessment excerpts are submitted as an attachment to the grant application.

The completion of this kick starter project set in motion the next move for BCPOS to apply for funding assistance to complete a set of construction documents that would address the cabin's structural deficiencies and non-structural repair needs. Without the completion of the construction documents the cabin's desired future condition would not be possible.

The construction documents scope will address all work recommended in the Historic Structure Assessment that includes site rehabilitation, structural rehabilitation, exterior wall rehabilitation, roof rehabilitation, chimney rehabilitation, exterior window and door rehabilitation, interior rehabilitation, and electrical system rehabilitation. All these elements will provide BCPOS the required tools to continue to build upon the steps towards future rehabilitation.

The proposed construction documents project will be completed in several strategic tasks that include the services of a licensed Colorado architect familiar with historic preservation principles and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation in order to incorporate those principals and guidelines into the project. As the project lead, the architect will review the 2022-2023 historic structure assessment report findings prior to assembling the team of subcontractor's for the project that will include a structural engineer, electrical engineer, and geotechnical engineer.

BCPOS will serve as the grant administrator and be responsible for all aspects of the grant reporting requirements that include a kick off meeting with the State Historical Fund (SHF) and selected contractor, progress reports, financial reports, and numerous project deliverables that range from photo documentation, architect and engineers resumes, subcontract certification forms, draft construction documents, final construction documents, and public outreach documentation.

The 2022-2023 historic structure assessment report recommended rehabilitation as the preferred treatment based upon the project findings and identified future use of the cabin. BCPOS concurs with the selected treatment and will follow that recommendation for this project and throughout its future stewardship of the cabin.

Next, BCPOS will publicly advertise the project on BidNet Direct, a large government competitive procurement website in order to ensure the most competitive bids by qualified contractors. A mandatory

pre-bid walk though will be held at the cabin for qualified architects by BCPOS staff.

After the bids are received, BCPOS will review, score the bids, and then submit its preferred architect's proposal to the SHF for approval. Upon approval, BCPOS will complete its own contracting process with the selected architect and then submit the required subcontract certification form to SHF for approval as a project deliverable.

Once the architect is under contract with BCPOS, a project kick off meeting will be held with SHF staff, BCPOS staff and the selected architect. The kick off meeting is anticipated to be a project deliverable and held onsite.

After the project kick off meeting is completed, the architect and their subcontractors will make several site visits to the cabin in order to produce field documentation notes and complete soil testing. The findings of the site visits will be incorporated into the draft construction documents by the architect for the architectural sheets and the structural engineer will complete the draft structural sheets.

The onsite field investigation will require selective limited removal of several targeted concealed finishes and features by a construction contractor at the architect's direction in order to determine as much about the cabin's structural condition as possible. Every attempt will be made to salvage any historic materials for future replacement during the selected removal of materials such as a small amount of siding, interior wallboard or wood trim.

Throughout the project BCPOS will stay in contact with the architect to ensure project clarity, efficiency and meet the architect and their team onsite as necessary.

Once the draft construction documents have been submitted and commented upon by SHF, the architect will revise the documents to ensure all comments and concerns are addressed. BCPOS will then resubmit the documents to the SHF for final approval. BCPOS is aware SHF takes up to 30 for review of project deliverables and has incorporated this additional time into the project schedule.

BCPOS's future plans for the cabin include the actual rehabilitation of the cabin in phases over the ensuing years with the ultimate goal to include the Tucker cabin on its popular BCPOS Hard Rock Mining Tour when the cabin is safe to visit. The BCPOS Hard Rock Mining Tour is a seasonal free guided public tour by BCPOS staff to various open space properties with a direct or related hard rock mining history. BCPOS owns numerous hard rock mining properties. BCPOS has been offering the Hard Rock Mining Tour once a month over the summer months for 10 years and hosted hundreds of attendees who enjoy seeing the properties from an inside perspective, their history and story to rehabilitate them. The Tucker cabin will serve as a wonderful addition to the Hard Rock Mining Tour since it is conveniently located along the existing Hard Rock Mining Tour route and just a few miles from the BCPOS owned and operated Nederland Mining Museum where the Hard Rock Mining Tours start.

Since Alfred Tucker, the original owner of the Tucker cabin, was a hard rock miner early in his arrival to the area before transitioning to ranching, the Tucker cabin will serve a key element of the story of hard rock miners and how their lives evolved past mining. A very common story that is often not known but an important part of Boulder County history. Long-term after the cabin rehabilitation is completed, the Tucker cabin could serve as a stand-alone interpretive site, complete with interpretive signs, when BCPOS designs the property's trail system in the future.

BCPOS is prepared for the building's long-term funding needs with allocations in its annual historic preservation capital improvements and maintenance budgets. BCPOS has long recognized the need to have an annual budget allocation for stewarding all of its historic properties through either completing smaller historic preservation projects with in-house staff or leverage its funding with external grant funding sources to complete larger historic preservation projects with a contractor. BCPOS is also prepared for the building's long-term maintenance needs with access to a maintenance budget and the

utilization of its small staff of historic preservation carpenters to carry out future maintenance needs.

Urgency

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Urgency (0-15 points) (1000 words or less)

Provide the following information, as it may apply to your project:

1. The physical conditions of the resource that make the project urgent. For example, if the grant is not funded now:
 - The conditions that could cause a public health or safety concern.
 - The conditions that will quickly deteriorate.
 - The conditions that will further damage the resource.
2. All current or potential threats to the resource(s) or program.
3. Any community participation, partnerships, or cash match funds that might be in jeopardy or dependent on this grant.
4. Whether this project will be delayed if this grant is not awarded.
5. Other valid reasons for urgency.

This project is urgently needed now due to the cabin's obviously poor condition and continued deterioration with each passing season at high elevation and drifting snow. After owning the cabin for almost 2 years, BCPOS historic preservation staff has been able to visually assess the building's condition for this length of time to understand the cabin's vulnerability due to its original construction techniques, age, and decades of deferred maintenance that have compounded to result in the cabin's current alarming condition. The 2022-2023 Historic Structure Assessment report confirms on page 37 BCPOS's opinion that "Overall, the Tucker Ranch cabin is in poor structural condition. The wood framing which bears in the soil is deteriorating and there are minimal extant below-grade foundation elements to support the structure. Floor and roof framing members are undersized for both residential and public use. In some instances, the framing has noticeably deflected. The stone chimney is not adequately connected to the main structure, is leaning away from the cabin, and is held in place by temporary come-along straps."

Overall, the cabin presents a general safety concern due to its isolated mountain location and abandoned appearance causing trespass issues that could result in vandalism and break-ins further deteriorating the cabin's condition. A portion of the exterior wood siding was ripped off last year by either vandals or bears that raised BCPOS's safety concerns for the cabin and its future. BCPOS Rangers have many property's to patrol but limited staff to cover such a large area.

Physically, as noted in the Historic Structure Assessment report, one of the cabin's most alarming safety concerns is the large exterior stone chimney that has separated from the cabin's exterior by 5 or more inches. Without the emergency intervention to strap the chimney back to the house using come-along straps it would have collapsed. But this measure will only buy sometime for the chimney. The stone chimney is a character defining feature and critical to preserve. In another emergency measure, BCPOS staff installed a temporary wood wall frame support in the building's interior living area to support the

sagging second story floor above from potential collapse due to its undersized framing.

Other building condition critical concerns as noted in the Historic Structure Assessment report include the poor foundation systems condition noting on page 39, “The foundation is in poor condition. The wood building framing rests in the dirt with no or minimal durable foundation elements to support the cabin’s walls and floors. Since these wood elements are in direct contact with earth, soil harboring moisture against the wood is causing wood decay fungi to flourish and deteriorate the wood structural elements. This deterioration mechanism is exacerbated by snowmelt against the building which can cause water to run through and around the crawlspace of the building. The floors slope down significantly towards the perimeter and interior bearing walls, indicating that the timber beams supporting the bearing walls are deteriorating and subsiding. There is extensive cracking (indicative of differential movement) of the concrete topping above the rubble masonry platform. At the west entry stair, the stones have moved and separated from the primary platform. There is a small tree growing into the topping slab at the south side of the north chimney; tree roots are a conduit for moisture to enter the slab and can cause movement in the slab and masonry below.”

Also noted in the Historic Structure Assessment report are the poor condition of the first and second floor wood framing. The report states on page 41 that “the [first] floor is not level in any of the rooms; it slopes down significantly towards the perimeter of the building and towards the central interior wall that runs in the north-south direction. The joists that were visible had areas of water staining and deteriorated wood material was visible at the perimeter of the crawlspace. Water staining is also evident at the northwest corner of the first floor sheathing. A likely cause of the floor slope is rot at the perimeter due to moisture infiltration from wood elements bearing on grade and from snowpack accumulating against the building. The [second] floor sags significantly at the midspan of the joists. The 3 ½” x 3 ½” beam that supports the joists at their midspan spans 14’-5” and is significantly undersized.”

Not surprisingly the roof framing system condition is also a point of urgency to complete the construction documents project soon. The Historic Structure Assessment report notes on page 44 that “the ridge of the main gable roof sags significantly at the center. The eave of the main gable roof bulges out of plane at the top of the wall on the west elevation. Both the ridge sag and the eave bulging are results of rafter thrust from the untied rafter pairs. It appears that the gable roof sags at the location of the dormers on both sides, indicating that the dormer rafters are likely undersized and are overloading the main roof framing.”

All of the concerns noted in the Historic Structure Assessment report and summarized above play an active role in contributing to the cabin’s continuing deterioration through every passing season at an elevation of 8600’ where the weather conditions are exacerbated.

After recently completing the Historic Structure Assessment report and recognizing the urgency to complete the most critical repairs as soon as possible, BCPOS is dedicated to continuing the momentum the Historic Structure Assessment project started by allocating a cash match in its operating budget with the hope to acquire a mini-grant to complete the logical next step of construction documents. This cash match allocation is dependent on successfully receiving a mini-grant or risk its reallocation to other BCPOS projects that complete for funding. If the mini-grant is not received, the project will not occur as there isn’t enough funding to cover the cost for the entire project.

Public Benefit

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Public Benefit, Project Promotion and State Preservation Plan (0-20 points)

Community Support & Benefit of Project (750 words or less)

Explain how the public supports and benefits from this project.

Things to consider:

- The use of the resource or project products.
- The source(s) of the cash match and whether it was provided by the community.
- Non-monetary ways the community supports this project.
- Enhancement of historic preservation, economic development, and heritage tourism.
- Encouragement of existing or new partnerships.
- Increasing historically excluded community engagement in preservation. (For example, LGBTQ+, women, religious minorities, etc.)

Highly recommended:

- Attach at least five recent letters of support (dated within the last six months) from people and organizations who will use this resource, community members and elected officials.

Boulder County Parks and Open Space (BCPOS) has been managing public land for 48 years with an actively engaged community that supports historic preservation projects since it embodies the protection of the county's rural character and cultural heritage - a key community value expressed a public opinion survey by the National Research Center for BCPOS where 85% of local respondents supported preserving farms and ranches. With this overwhelming support from the community to preserve its historic and rural character, BCPOS will endeavor to ensure a successful public benefit element as part of this project.

Building upon the existing broad community support for this project and embodied by the letters of support, this project will benefit the public by increasing awareness of the stewardship of the publicly-owned historic properties and highlighting the importance BCPOS places on these resources while trying to balance other community driven resource values the department manages that include wildlife, forest health, plant ecology, water conservation, and public access.

The project will not only increase public support for historic preservation project by showing BCPOS in action supporting their expressed community value, but will begin the critical next step in the physical preservation of the cabin. Often public agencies support historic preservation but have a hard time executing the physical preservation of historic properties due to the complexities of issues that include political will and funding. BCPOS has a long record of supporting historic preservation projects and being able to execute them on behalf of the public it serves.

Project Promotion (300 words or less)

Explain how you will promote this project, such as:

- Public events or celebrations
- Physical and digital media
- Presentations
- Other

BCPOS proposes to share with the public the benefit of this project through several different outreach opportunities and tools to reach as much of the public as possible.

The project will be kicked off with announcements at the monthly public meetings of the Boulder County Historic Preservation Advisory Board and the Boulder Heritage Roundtable. For some background context, the Boulder Heritage Roundtable is a consortium of history organizations and local governments that have been meeting to share our heritage and promote historic preservation through engaging with the public since the early 1990s. The Boulder Heritage Roundtable consists of organizations such as the University of

Colorado, City of Boulder, Historic Boulder, Superior Historical Commission, Lyons Redstone Museum, Lafayette Miners Museum, and the Niwot Historical Society.

Taking advantage of social media opportunities, BCPOS will post an announcement of the grant award on Twitter (9,576 followers), Facebook (13,000 followers), and Instagram (5,225 followers).

In order to build upon more digital promotional opportunities, a web page will be created to introduce the project and provide updates and photos. The BCPOS website is visited approximately 700,000 times a year.

BCPOS will also cover the traditional medium by creating a press release to announce the project that goes directly to 5,842 recipients and also includes the local news media agencies around Boulder County.

Following the kick off announcements, an article about the project will appear in a future issue of the BCPOS quarterly magazine "Images." Images is an educational publication with a direct hard copy mailing to 689 recipients and also available digitally on the BCPOS website. The article will introduce the project and promote the commitment BCPOS has made to rehabilitating the cabin for future public benefit.

All of the promotional efforts listed above will ensure a wide broadcast announcement of the grant award.

State Preservation Plan (200 words or less)

Explain how this project will directly support at least two goals in the [2020 Colorado Statewide Preservation Plan Summary](#)

Using the Colorado Statewide Preservation Plan as inspiration for all its historic preservation projects for many years, BCPOS will continue this tradition by seeking guidance from the 2020 Colorado Statewide Preservation Plan for the Tucker cabin construction documents project.

Reviewing the 2020 plan, the Tucker cabin construction documents project will directly support 3 goals. They are the following:

Goal A: Preserving the Places that Matter by moving towards the objective to preserve the cabin as one of Colorado's irreplaceable historic resources through the department's desire to rehabilitate the cabin over the ensuing years and provide public visitation to the property.

GOAL C: Shaping the Preservation Message by actively taking a role to shape a positive historic preservation message. The key to effective messaging is to highlight how a historic preservation project is a positive movement for Colorado's future and strengthen appreciation of heritage and historic places toward a positive community identity.

GOAL D: Publicizing the Benefits of Preservation through the public facing announcements to stakeholders and general outreach activities that include press releases, webpage content and social media postings.

Project Timeline

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Project Timeline

Please check the box below each statement:

I understand that if awarded, it can take up to 6 weeks to execute the grant agreement with the State Historical Fund.

Yes

I understand that the State Historical Fund agreement period is 24 months and this project will be completed within that time period.

Yes

I understand that the State Historical Fund has 30 calendar days to complete review of the deliverables (products) that will be required with this project and I have accounted for the 30 day reviews within the 24 month agreement period.

Yes

I understand that weather may delay completion of some projects and I have accounted for possible delays within the 24 month agreement period.

Yes

Agreement

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Acknowledgement of Award Conditions

I understand and agree with the following conditions associated with all State Historical Fund grants:

- I understand that my organization will enter into a grant agreement with the State of Colorado. My organization will be responsible for meeting the terms of the grant agreement, and cannot pass fiscal or project responsibility to another organization.**
- I understand that the State grant agreement contains non-negotiable terms, and it is my responsibility to review the [SHF grant templates](#) prior to going under award to assure that my organization accepts those terms.**
- I understand that my organization will work in partnership with the State Historical Fund to meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. I will comply with State Historical Fund**

review expectations and refrain from carrying out any work until I have the approval of a State Historical Fund Resource Specialist to proceed. For archaeology and survey projects, I will adhere to the current [Colorado Cultural Resource Survey Manual](#).

- I understand that all cash match must be in the bank before my organization signs the State Historical Fund grant agreement.
- I understand that my organization is solely responsible for determining if my cash match resources are eligible for use with State Historical Fund grant programs.
- I understand that the State Historical Fund will only pay for work that takes place within the State Historical Fund grant agreement period.
- I understand that all project expenses must be associated with one of the tasks listed in my scope and budget and reported as such. I am not allowed to collapse task items under one category.
- I understand project cost savings will be shared with the State Historical Fund according to the grant request/cash match ratio.
- I understand that the State Historical Fund will require documentation of any and all grant administration or indirect expenditures, including time sheets, rates, and clear calculations.
- I understand that property protections may apply to my project based on project type and cumulative State Historical Fund funds previously received for work on the building. If applicable, I will receive a letter explaining the requirements after all applications are processed.
- I understand that my organization must adhere to all program policies, state regulations, provisions, and laws.
- I understand that my organization cannot use State Historical Fund funds in a manner that may result in an actual or perceived conflict of interest.

By checking the box below, you are indicating that you understand and agree with the above conditions associated with State Historical Fund grants, if awarded.

Yes

Questions about the grant application? Please refer to the [State Historical Fund Guidebook](#) or call SHF staff at 303-866-2825.

Attachments

Once you have chosen your file, you must select the **Upload** button to complete the attachment.

REQUIRED

Colorado Substitute W-9 Applicant Organization

Required W-9 form available [here](#).

Label file in this format: Applicant Organization_W9

[Boulder County W-9.pdf](#)

Signature Page

Please download, complete, and attach your Signature Page. A blank copy can be found [here](#).

Label file in this format:: Applicant Organization_Title

Proof of Local Designation (Only required if physical work/excavation or an acquisition is occurring and the property/site is not on the State or National Register).

Label file in this format: Applicant Organization_Designation

[Boulder_County_Designation.pdf](#)

BIPOC Letters of Support (Only required if you are requesting the BIPOC cash match).

Please attach two letters of support from the BIPOC communities the project benefits.

Label file in this format: Applicant Organization_BIPOC LOS

IRS Letter of Determination (Only required for religious organizations).

Label file in this format: Applicant Organization_IRS Letter

Archaeological Permit (Archaeology Projects Only)

All applications for archaeology projects must include an approved archaeological permit from either the [Office of Archaeology and Historic Preservation](#) (for private land and state lands, which includes city and county as well as any political subdivision of the state) or the federal agency managing the federal land.

Label file in this format: Application Organization_Archaeology Permit

HIGHLY RECOMMENDED

Bids and/or Estimates

Label file in this format: Applicant Organization_Bids_ or_Estimates

[Boulder County_Estimate.pdf](#)

Excerpts of most recent supporting documents

(archaeological assessment, historic structure assessment, construction documents, survey forms, reports)

Label file in this format: Applicant Organization_HSA Excerpts

[Boulder County_HSA_Excerpts.pdf](#)

Images

Label file in this format: Applicant Organization_Images

[Boulder_County_Images.pdf](#)

Letters of Support

Label file in this format: Applicant Organization_Letters

Overall Image

Label file in this format: Applicant Organization_Overall Image

[Boulder County_Image.JPG](#)

Professional Project Team Members' Resumes

Label file in this format: Applicant Organization_Resumes

[Boulder_County_Resume.pdf](#)

OPTIONAL

Detailed Scope of Work and Budget

Label file in this format: Applicant Organization_Detailed SOW

Historic Images

Label file in this format: Applicant Organization_Historic Images

[Boulder_County_Historic_Images.pdf](#)

Maps, Site Plans, or Drawings

Label file in this format: Applicant Organization_Plans

[Boulder_County_Plans.pdf](#)

Media Images, Newspaper Clippings, etc.

Label file in this format: Applicant Organization_Media Images

[Boulder_County_Media_Images.pdf](#)

Miscellaneous Attachments

Label file in this format: Applicant Organization_Misc

[Boulder County_Misc.pdf](#)

Research Design

For example, document outlining archaeological or survey research questions and methods for obtaining data to answer those questions.

Label file in this format: Applicant Organization_Research Design

Request for Taxpayer Identification Number and Certification

Give Form to the
requester or State
Department. Do not
send to the IRS.

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. Boulder County, Colorado	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
<input type="checkbox"/> Individual/sole proprietor or single-member LLC	<input type="checkbox"/> C Corporation
<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____	<input type="checkbox"/> S Corporation
<input type="checkbox"/> Other (see instructions) ▶	<input type="checkbox"/> Partnership
<input checked="" type="checkbox"/> Government	<input type="checkbox"/> Trust/estate
5 Remittance address (number, street, and apt/suite or PO Box). See instructions. Po Box 471	
6 City, state, and ZIP code Boulder Co 80306-0471	
7 Contact name and email	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number												
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Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here

Signature of U.S. person ▶

Date ▶

6/9/22

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)
 - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

RESOLUTION 2021-67

**A resolution conditionally approving Boulder County Community Planning & Permitting
Docket HP-21-0004: Tucker Ranch**

Recitals

A. Boulder County Parks and Open Space (the “Applicant”) applied to Boulder County under Article 15 of the Boulder County Land Use Code (the “Code”) for a Boulder County Historic Landmark Designation of a portion of the 324-acre site known as Tucker Ranch.

B. The subject property is located at 1001 Caribou Road, in Section 14, Township 1 South, Range 73 West of the 6th Principal Meridian, in a Forestry zoning district in unincorporated Boulder County.

C. The proposed landmark site is a 1-acre area of the 324-acre parcel. The site includes five contributing resources—the house, the privy, the cistern, the shed, and the driveway.

D. The parcel was part of the vast holdings of Alfred and Margaret Tucker and their family who farmed and ranched. Alfred Tucker first arrived in Colorado in 1859, purchased the first 160 acres of this parcel in 1872, and subsequently added another 160 acres purchased from the United States. Additionally, the Tuckers owned another 880 acres spread throughout the Golden/Arvada area, Larimer County, and Denver.

E. The house was built c. 1871 and retains its physical integrity from the periods of significance associated with the Tucker family. It features a large fieldstone chimney, historic siding, and historic windows. The other historic resources appear to retain their physical integrity as well although ages are unknown.

F. Boulder County purchased the property in 2020 from the Tucker Family.

G. On September 2, 2021, the Historic Preservation Advisory Board (“HPAB”) met and reviewed the application and determined that the site was eligible for landmark status. The HPAB voted unanimously to recommend approval of landmarking to the Board of County Commissioners (the “Board”).

H. The above described request for landmark designation was processed and reviewed as Boulder County Community Planning & Permitting Docket HP-21-0004 (the “Docket”), as further described in the memorandum and written recommendation to the Board by Boulder County Community Planning & Permitting Department planning staff dated September 9, 2021, together with its attachments (the “Staff Recommendation”). The Staff Recommendation found that the Docket could meet the criteria for approval with recommended conditions, and therefore,

recommended that the Board conditionally approve the Docket.

I. At an online public hearing on the Docket held on September 9, 2021 (the “Public Hearing”), as further reflected in the official record of the Public Hearing, the Board considered the recommendation of the HPAB and the Staff Recommendation, as well as the documents and testimony presented by County Community Planning & Permitting Department planning staff and the Applicant. No members of the public spoke at the Public Hearing.

J. Based on the Public Hearing, the Board finds that the Docket meets one or more of the criteria for landmark designation contained in Article 15 of the Code, specifically Criteria 15-501.A.1, 3, 4, subject to the conditions stated below.

K. Therefore, the Docket can be approved, subject to the conditions stated below.

Therefore, the Board resolves:

Docket HP-21-0004 is approved on the basis and terms set forth in this Resolution, above, and subject to the following conditions:

1. Alteration of any exterior feature of the structures or construction within the site area will require review and approval of a Certificate of Appropriateness (“CA”) by Boulder County (applicable County review processes, including but not limited to Site Plan Review, may be required).
2. Regular maintenance that prolongs the life of the landmark, using original materials or materials that replicate the original materials, will not require review for a CA, provided the Community Planning & Permitting Director has determined that the repair is minor in nature and will not damage any existing features. Emergency repairs, which are temporary in nature, will not require review (depending on the type of work, a building permit may still be required).
3. The Applicant shall be subject to the terms, conditions, and commitments of record and in the file for Docket HP-21-0004: Tucker Ranch.

[Signature Page to Follow]

A motion to approve the Docket was made by Commissioner Marta Loachamin, seconded by Commissioner Claire Levy, and passed by a 3-0 vote.

ADOPTED as a final decision of the Board on this 28th day of September 2021.

**BOARD OF COUNTY COMMISSIONERS
OF BOULDER COUNTY:**

Matt Jones

Matt Jones, Chair

Marta Loachamin

Marta Loachamin, Vice Chair

Claire Levy

Claire Levy, Commissioner

ATTEST:

Cecilia Lacey

Clerk to the Board

August 28, 2023

Carol Beam
Boulder County Parks & Open Space
5201 St. Vrain Road
Longmont, Colorado 80503

Re: Tucker Ranch Cabin
Construction Documents – Architectural & Engineering Consulting Fee Proposal

Dear Carol:

Form+Works Design Group, LLC is pleased to provide a fee proposal for architectural and engineering consulting services to complete Construction Documents for the Tucker Ranch Cabin located in Boulder County, Colorado. The Construction Documents will include all work recommended in the Historic Structure Assessment, completed in 2022, outlined below:

1. Site Rehabilitation
2. Structural Rehabilitation
3. Exterior Wall Rehabilitation
4. Roof Rehabilitation
5. Chimney Rehabilitation
6. Exterior Window and Door Rehabilitation
7. Interior Rehabilitation
8. Electrical System Rehabilitation

It is our understanding that the Cabin will be used for interpretive purposes.

DELIVERABLES: The following deliverables are anticipated and included in the costs below:

- Before / Existing Condition Photos
- Historic Photos
- Draft Construction Documents
- Final Construction Documents
- Geotechnical Engineering Report
- Cost Estimate

PROPOSAL: Form+Works Design Group proposes to provide consulting services necessary to complete the Construction Documents for the Tucker Ranch Cabin as outlined above for the fixed sum of \$65,650.00, which includes structural engineering and electrical engineering fees and all related project expenses. During field documentation work, currently concealed finishes and features will need to be exposed for review. This selective demolition work can be accomplished by Boulder County staff or a well-qualified preservation contractor. A fee for

contractor assistance, including production of a cost estimate is included in the fees outlined below.

To aid you in understanding our proposed fee in more detail, we have included the following breakdown of the design services:

Site Visits and Field Documentation	\$ 4,800.00
Preparation of Draft Construction Documents	\$ 13,500.00
Preparation of Final Construction Documents	\$ 8,500.00
Electrical Engineering Consultant	\$ 8,600.00
Structural Engineering Consultant	\$ 21,000.00
Geotechnical Engineering Report	\$ 5,500.00
Contractor Cost Estimate & Assistance	\$ 3,500.00
Reimbursable Expenses (printing, shipping, and travel costs)	\$ 250.00
Total	\$ 65,650.00

The proposed fee includes the reproduction costs for two copies of the draft and final Construction Documents. One of these copies will be submitted to History Colorado and one will be provided to the Owner. Electronic copies of all deliverables will be provided at no additional expense. Additional hard copies of the documents will be provided for the cost of reproduction as a reimbursable expense upon request. Mileage will be invoiced at History Colorado rates.

EXCLUSIONS:

- Bidding, Permitting, and Construction Administration Services
- Engineering Services not listed above
- Site Survey
- Daylight modeling
- LEED certification
- Life cycle cost analysis
- Rebate program paperwork
- Commissioning
- Phased or multiple document packages

SCHEDULE: Form+Works Design Group is proposing the following tentative schedule to be considered for implementation of the Construction Documents project based on the State Historical Fund required contract and review periods.

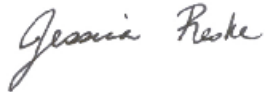
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|-------------------------------|-----------------|
| • Submit grant application | October 1, 2023 |
| • Notification of grant award | December 2023 |
| • SHF contract complete | February 2024 |

- Kick-off meeting with SHF March 2024
- Production of CDs March-June 2024
- Submit draft CDs for review June 2024
- SHF review of draft CDs complete July 2024
- Final CDs complete August 2024

We understand that you plan to apply for a mini-grant for the Construction Documents project in the October 1, 2023 grant round. The above schedule may position you for a SHF construction grant application in Fall of 2024, allowing for construction work in Spring – Summer of 2025. Upon notice to proceed, we will work with you to set a project schedule which meets the deadlines needed by the County and aligns with grant funding opportunities anticipated. It is anticipated that all work can be completed within the standard State Historical Fund 2-year contract period.

We are looking forward to working with you on this project. If you have any questions concerning this proposal, I will be glad to discuss them with you.

Sincerely,
form+works design group, LLC



Jessica Reske, AIA, LEED AP | President



Tucker Cabin – Boulder County Assessor's Office photo – circa 1949



Tucker Cabin – Boulder County Assessor's Office photo – circa 1949



Tucker Cabin – view to the west



Tucker Cabin – southeast elevation



Tucker Cabin – southwest elevation



Tucker Cabin – northwest elevation showing collapsed red brick chimney on roof



Tucker Cabin – exterior stone chimney with emergency strapping in place to prevent chimney failure



Tucker Cabin – exterior stone chimney detail showing large separation away from building exterior



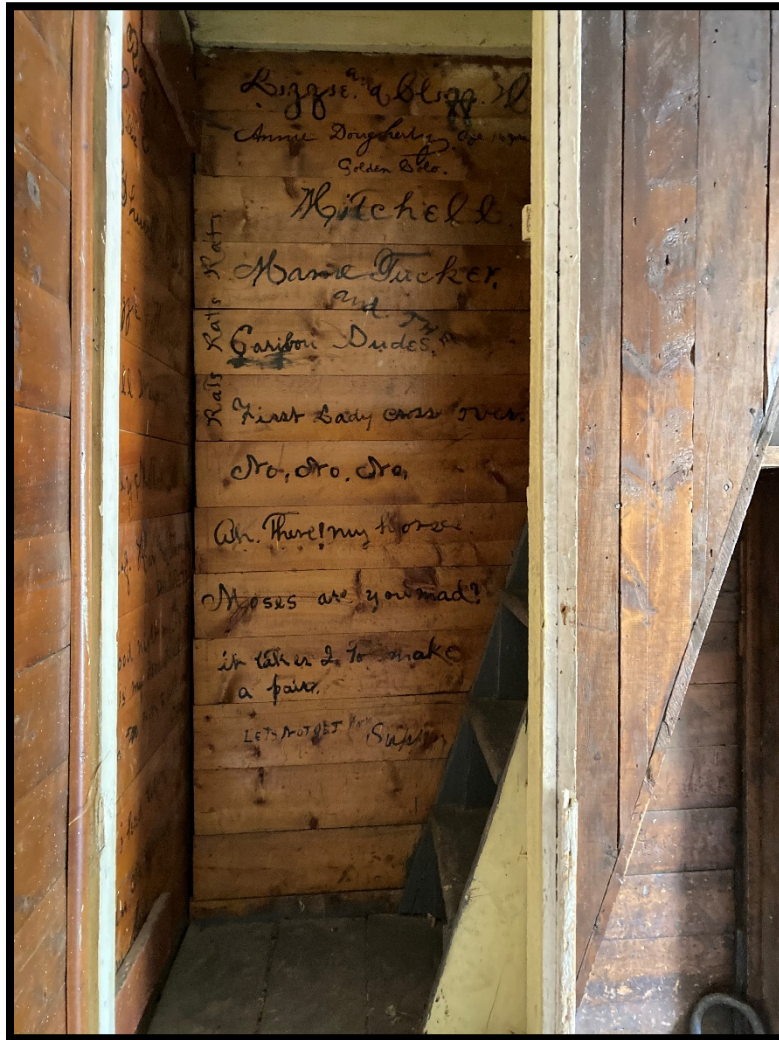
Tucker Cabin – exterior concrete porch detail showing damage with cabin siding damage in background



Tucker Cabin – living room overview after interior cleanup and before interior temp wall installed



Tucker Cabin – living room overview after interior cleanup, steps to 2nd floor are located to the left of the fireplace



Tucker Cabin – detail view of steps to 2nd floor showing historic painted graffiti on walls by Tucker family



Tucker Cabin – dining area overview after interior cleanup



Tucker Cabin – kitchen area overview after interior cleanup



Tucker Cabin – 1st floor bedroom after interior cleanup



Tucker Cabin – 2nd floor bedroom with sagging unsafe floor after interior cleanup

Tucker Ranch Cabin Historic Structure Assessment

1001 Caribou Road
Nederland, Colorado 80466

SHF Grant #2022-HA-003
Deliverable #5 - Final HSA
January 2023



**Tucker Ranch Cabin
1001 Caribou Road
Nederland, Colorado 80466**

**HISTORIC STRUCTURE ASSESSMENT
AND
PRESERVATION PLAN**

This project was paid for by a grant from the History Colorado State Historical Fund
Grant # 2022-HA-003

Site No. 5BL.14491

Deliverable #5 – Final Report
January 2023

Architect: Form+Works Design Group
Structural Engineer: JVA, Inc.

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1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND/PARTICIPANTS

This historic structure assessment and preservation plan is based on a series of visits to the building during which the conditions of major components of the building were observed and their physical conditions and problems noted. The on-site observations occurred in October and November of 2022. Additional photos were taken in April and August of 2022 and were used for reference in this report. Information obtained during the on-site observations is organized by major building components as follows: site, foundations, building structural system, building envelope - exterior walls, building envelope - roofing and waterproofing, building envelope - doors and windows, interior finishes, mechanical systems, and electrical systems.

The on-site observations and development of the historic structure assessment and preservation plan were completed by Jessica Reske, AIA, LEED AP of Form+Works Design Group. Additional observations were completed by members of the project team, as listed below. Further research and information including dates of construction and changes was provided by the Owner. This project was paid for by a State Historical Fund grant from History Colorado.

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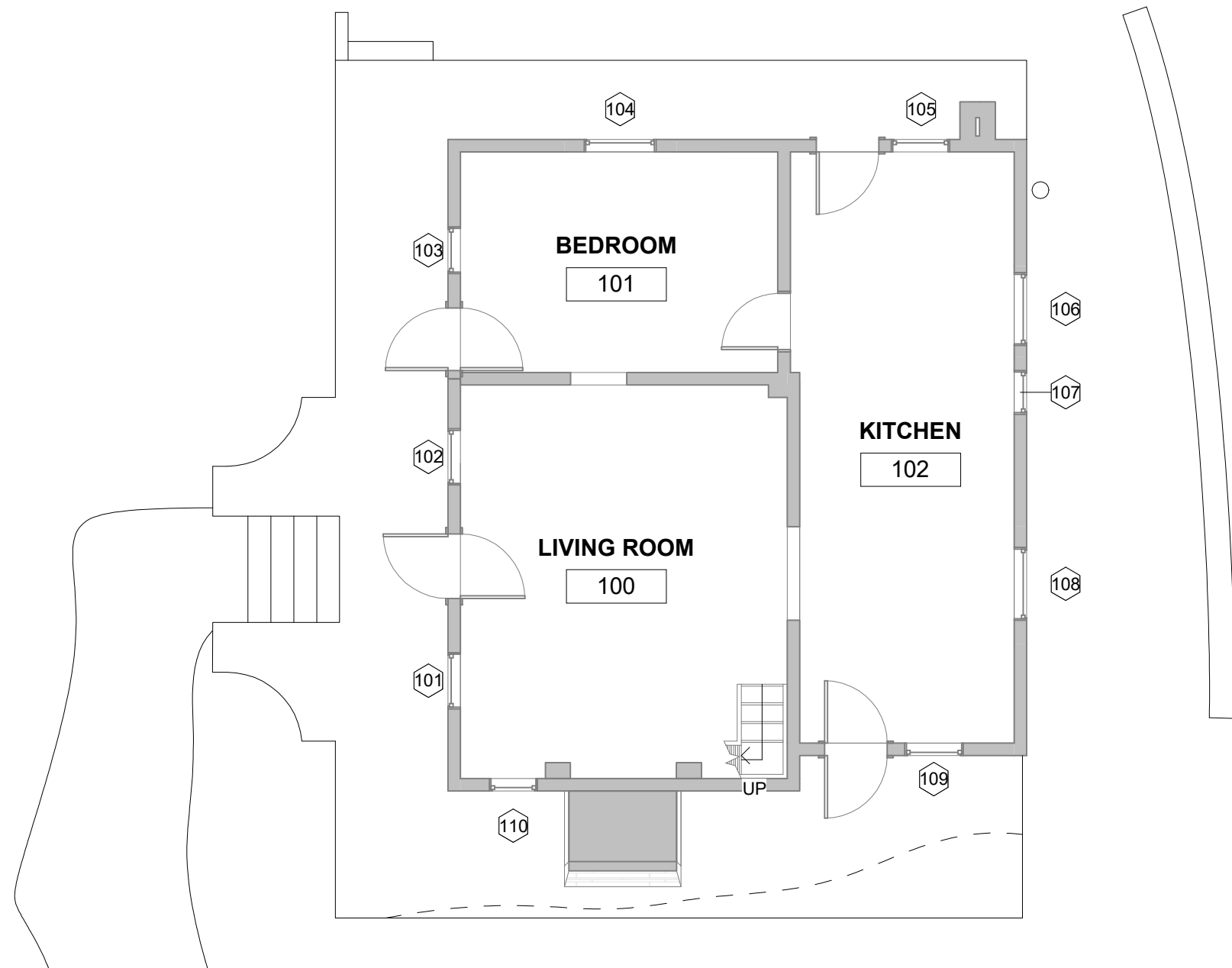
Architect:

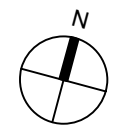
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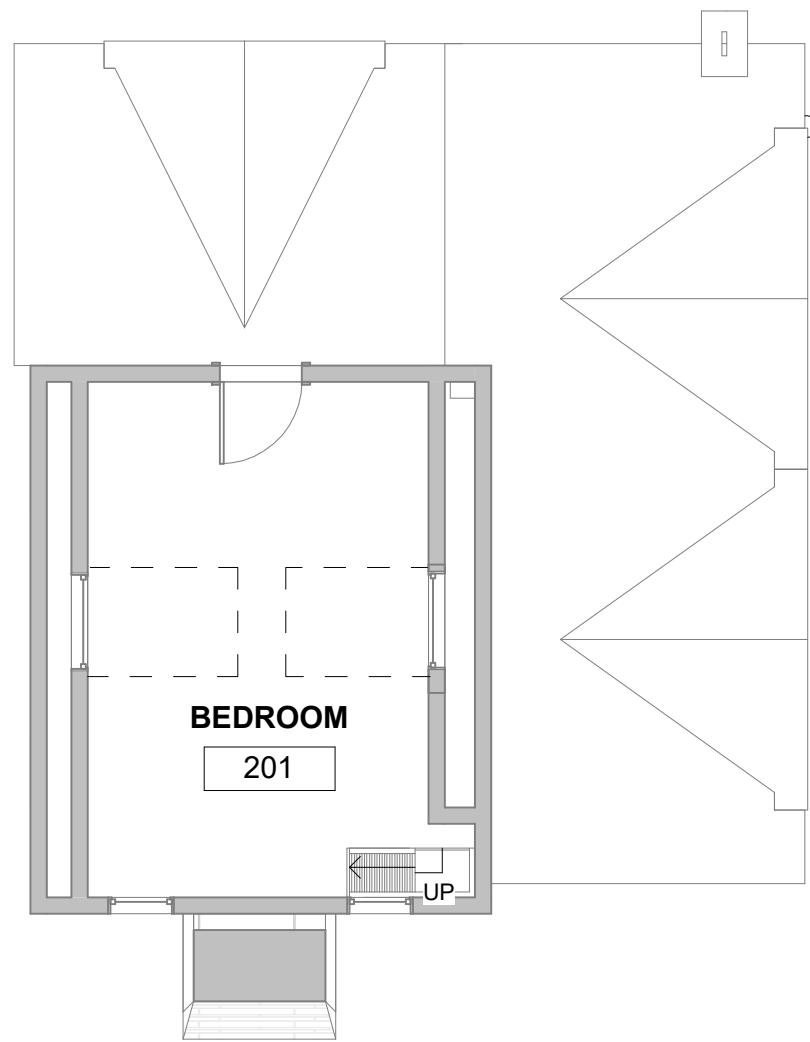
2.2 EXISTING FLOOR PLANS




 ① FIRST FLOOR DEMO PLAN
 3/16" = 1'-0"

form + works
 design group, LLC

TUCKER OPEN SPACE HSA		NOV 15, 2022	FIRST FLOOR - EXISTING	AD-101
Project Number	22-041	Scale		



① SECOND FLOOR
3/16" = 1'-0"

form + works
design group, LLC

TUCKER OPEN SPACE HSA

NOV 15, 2022

SECOND FLOOR -
EXISTING

AD-102

Project Number

22-041

Scale

3/16" = 1'-0"

2.3 PROPOSED USE

The building was constructed as a cabin that was part of a ranch complex. Currently, the building is vacant. It is anticipated that the building will be used as a stop on Boulder County's Hard Rock Mining Tour after rehabilitation is completed.

The Rehabilitation standards are most applicable to the project. Given that there are few historic photos and no historic drawings of the building available, and there is uncertainty regarding dates of alterations and additions to the building, Rehabilitation standards are most appropriate.

The Secretary of the Interior's Standards for the Treatment of Historic Properties Rehabilitation guidelines are as follows:

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings shall not be undertaken.
- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
- Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old

and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

3.0 STRUCTURE CONDITION ASSESSMENT

This building condition assessment and treatment recommendations are based on a number of visits to the building during which the conditions of major components of the building were reviewed and their physical conditions and problems noted. Information obtained during these observations is organized by major building components as follows: site work, foundations, building structural system, building envelope - exterior walls, building envelope - roofing and waterproofing, interior finishes, mechanical systems, and electrical systems.

Definitions:

This building condition assessment makes use of terms concerning the condition of building components which are defined as follows.

Good Condition: An element, component or system is evaluated in good condition it meets the following criteria:

- It is intact, structurally sound, and performing its intended purpose.
- There are few or no cosmetic imperfections.
- It needs no repair and only minor or routine maintenance.

Fair Condition: An element, component or system is evaluated in fair condition when one or more of the following conditions are evident:

- There are early signs of wear, failure, or deterioration, although the feature or element is generally structurally sound and performing its intended purpose.
- There is failure of a sub-component of the feature or element.
- Replacement of up to 25% of the feature or element is required.
- Replacement of a defective sub-component of the feature or element is required.

Poor Condition: An element, component, or system is evaluated in poor condition when the following is evident:

- It is no longer performing its intended purpose.
- It is missing.
- It shows signs of imminent failure or break-down.
- Deterioration / damage affects more than 25% of the feature or element and cannot be adjusted or repaired.
- It requires major repair or replacement.

3.1 SITE

3.1.1 Associated Landscape Features

The site around the cabin is typically covered with grasses and native vegetation (*Re: Figure 6 and Figure 7*). Immediately adjacent to the building there is a concrete walk/patio to the south, west, and north. Stairs up to this area are located along the west side (*Re: Figure 8*). The stairs include four steps with 10 ½ inch treads and 8 inch risers. To either side of the stairs there is a masonry wing wall. The south wing wall includes a stone inscribed with '1924.' A similar stone appears to have been located on the north wing wall, however, most of that stone is no longer extant. The concrete surface appears to be approximately 2 inches thick (*Re: Figure 9*).

To the west of the building there is an informal trail through the grasses which provides local access through the site (*Re: Figure 10*). The trail leads to a plank bridge over a low stream. Deciduous trees are typical along the stream. To the southwest of the building there is an in-ground cistern. A path through the grasses also continues from the south door on the west elevation to the south of the building, providing access up to Caribou Road (*Re: Figure 11*).

To the south of the building, the path from the west entrance continues, partially following the historic driveway path (*Re: Figure 11*).

To the east of the building, the historic driveway is visible, elevated above the cabin. Along the west side of the driveway there is a barbed wire fence (*Re: Figure 12*). Below the fence is a stone retaining wall. The retaining wall varies in height with the site grade. The wall is constructed of dry stack stone, which is partially embedded in the site. Large coniferous trees are typical to the east of the cabin. A propane tank is located at the north end of the east elevation. (*Re: Figure 13 and Figure 14*)

To the north of the cabin a shed and the remains of an outhouse are extant (*Re: Figure 15 and Figure 16*). The outhouse is tipped on its side. At the north end of the site there is a grove of aspen trees.

Condition:

The site is in good condition overall with the exception of items specifically identified as follows. Note that site grading is addressed in Section 3.1.2 Grading and parking and vehicular access is addressed in Section 3.1.3 Parking.

The concrete patio / walkway along the north, west, and south elevations is in poor condition. Sections of concrete are cracked, spalling, and heaving (*Re: Figure 9*). The stone walls have sections of mortar loss and stone displacement.

A gap is typical between the concrete pavement and the bottom of the exterior wall along the north elevation. A large gap is also present at the north door threshold on the west elevation. These gaps allow site drainage to flow beneath the building.

The stone retaining wall to the east of the building is in poor condition. Extensive stone displacement has occurred due to site drainage and erosion in this location. Many of the stones are extant, but not retaining the soil in this area. (*Re: Figure 17*)

Recommendations:

- Refer to Section 3.1.3 Parking for vehicular access recommendations.
- Refer to Section 3.1.2 Grading for site grading and drainage recommendations.
- Rehabilitate the raised walkway / patio area around the building. (Critical) Rehabilitation should include the following items:
 - Coordinate with structural rehabilitation work necessary at the foundation of the cabin and the patio area to ensure all areas of work are addressed prior to re-pouring the concrete slab.
 - Replace areas of missing, cracked, and spalled concrete to match the existing materials.
 - Reset loose and displaced stone and repoint stone walls.
 - Preserve historic features of the patio and wing walls including date-stamped concrete adjacent to the stair.
- Fill the gaps between the cabin and adjacent concrete walks. (Critical)
- Establish a well-graded drainage swale along the east side of the building. Consider paving the area with concrete to allow for easy clean-out of debris and to facilitate the flow of water out of this area of the site. (Critical)
- Rehabilitate the stone retaining wall to the east of the building. (Serious)
 - Consult with civil and structural engineers to determine if additional reinforcement and stabilization is necessary in this location prior to rehabilitation of the stone. A concrete retaining wall faced with stone may be necessary to stabilize the site in this area.
 - Restack stone where displacement has occurred.
 - Replace stone in-kind where missing or damaged.
- Coordinate with ADA access requirements for the site. (Routine)
- Retain the shed and outhouse to the north of the cabin. (Routine)



Figure 6: Overall view of the site to the north and west of the building.



Figure 7: Overall view of the site from the south.



Figure 8: Stairs up to the concrete patio along the west side of the cabin.



Figure 9: Patio / walkway along the west side of the building.



Figure 10: Site to the west of the cabin. Note plank bridge and cistern visible in the photo.



Figure 11: Path providing access from Caribou Road to the cabin. Note location of the original driveway to the right in the photo.



Figure 12: Barbed wire fence and stone wall to the east of the cabin.



Figure 13: Site to the east of the cabin.



Figure 14: Site to the east of the cabin.



Figure 15: Outhouse located to the north of the cabin.



Figure 16: Shed located to the north of the cabin.



Figure 17: Detail view of stone retaining wall to the east of the building.

3.1.2 Grading

The site slopes from east to west, with the east side of the site higher than the west (*Re: Figure 18*). To the north and south of the building, areas of the site slope toward the building (*Re: Figure 19*).

Condition:

Grading around the site is in fair condition. To the east of the building there is a swale in which water and snow can build up against the building. Other low spots and areas sloped toward the building were observed to the north and south of the cabin. At the door threshold along the west elevation a gap was noted which allow site water to flow beneath the cabin (*Re: Figure 20*). This gap is located between the door opening and the adjacent concrete patio.

Recommendations:

- Re-grade site where necessary to ensure positive drainage away from the building. (Critical)
 - Note that a site survey may be required in order to complete full site drainage design work.
 - Engage a well-qualified civil engineer to complete site drainage design.
- Establish a well-graded drainage swale along the east side of the building. Consider paving the area with concrete to allow for easy clean-out of debris and to facilitate the flow of water out of this area of the site. (Critical)
- Fill gaps at door thresholds to eliminate water flow from pavement adjacent to the building into the area beneath the building. (Critical)



Figure 18: Site slope to the east of the building.



Figure 19: Site slope to the south and east of the building.



Figure 20: Gap at door threshold on the west elevation.

3.1.3 Parking

Parking is not currently provided on site. Historically, a driveway was located to the east of the building (*Re: Figure 21*). This driveway is currently used as walking path, providing access from Caribou Road down to the site (*Re: Figure 22*). The north end of the historic driveway connects to an adjacent property which is not owned by Boulder County.

Condition:

Parking on site will be needed for the anticipated use of the building as a stop on the mining tour. The historic driveway to the east of the building is the best, most historically appropriate, location. For full use of the historic driveway, coordination will be needed with the property owner to the north.

Recommendations:

- Establish full access to the historic driveway on site. (Serious) Note that this will require coordination with the property owner to the north.



Figure 21: Historic driveway area located to the east of the cabin.



Figure 22: Path from Caribou Road down to the cabin, following a section of the historic driveway.

3.1.4 Archaeology

No archaeological surveys have been completed at the site.

Recommendations:

- Follow the archaeological guidelines required by the Office of Archaeology and Historic Preservation for all construction activities which disturb the ground on the site. (Routine)

3.2 STRUCTURAL SYSTEM

3.2.1 General Structural System Description

The Tucker Ranch cabin is a one-and-a-half story wood framed structure founded on grade and surrounded on three sides by a rubble masonry platform (Re: Figure 23 and Figure 24). The cabin is rectangular in plan; the two rooms to the west are likely part of the original construction from the 1870's. The kitchen, which extends the length of the building along the east, is a later addition. The cabin has a gable roof with shed dormers and two shed roofs with gable dormers. There is one rubble masonry stone chimney and one brick masonry chimney. The lateral force resisting system (LFRS) consists of the wood framed shear walls and the floor and roof diaphragms.

Design Criteria used for preliminary analysis is as follows:

- 2015 IBC with Boulder County Amendments
- Risk Category: II
- Ground Snow: 55 psf
- Flat Roof Snow: 47 psf + drift
- Wind: 175 mph ult
- Live Load
 - First Floor: 100 psf (Public Access for Interpretation)
 - Second Floor: 30 psf Habitable Attic (with fixed stair) or Load Post for Incidental Human Occupancy
- Frost Depth: 30"

The cabin was built for residential occupancy (Risk category II); however, it is proposed to utilize the first floor of the cabin for public access as an interpretive space that is part of a local history tour. The second floor will not be used for public access. Both the original use and the proposed future use of the building are assigned to Risk Category II so there is no change in Risk Category. Since there are no changes to the Risk Category, no lateral system upgrades are triggered by Code requirements. However, since there is an increase in proposed gravity (live) loading with the change in use, the structural floor systems must meet current Code requirements. Roofing framing upgrades are triggered by the roof's deformed shape which indicates inadequacy.

Condition:

Overall, the Tucker Ranch cabin is in poor structural condition. The wood framing which bears in the soil is deteriorating and there are minimal extant below-grade foundation elements to support the structure. Floor and roof framing members are undersized for both residential and public use. In some instances, the framing has noticeably deflected. The stone chimney is not adequately connected to the main structure, is leaning away from the cabin, and is held in place by temporary come-along straps.

Since there is no proposed change in Risk Category and the building is not showing signs of distress that would indicate a LFRS deficiency (such as racking), no LFRS bolstering is triggered by Code. However, there are some minor actions that would be prudent to implement to strengthen the LFRS at relatively little cost or disturbance. These are included in the recommendations for their respective structural system below.



Figure 23: Front (west) elevation of Tucker Ranch cabin.



Figure 24: Tucker Ranch cabin looking west-northwest.

3.2.2 Foundation Systems

The east elevation of the cabin is situated adjacent to a steep embankment sloping down from east to west. There is a rubble stone retaining site wall east of the cabin, after which the grade continues to gently slope down from east to west across the length of the building.

The wood-framed walls and floors of the Tucker Ranch cabin appear to be founded directly on soil. It is possible that the cabin was originally founded on timber beams around the perimeter and at interior bearing locations, but the timber beams have since deteriorated or been buried by grade that has built-up around the cabin.

The platform that surrounds the cabin at the west, north, and south is founded on rubble stones built up on the sloping grade. There is a variable depth concrete topping on the rubble stone platform which does not extend under the building.

The stone chimney at the south elevation is founded on the rubble stone masonry platform. The brick chimney at the northeast corner of the building is likely founded on a brick foundation. These foundation elements likely extend slightly below grade, but confirmation of this condition is beyond the scope of this report.

Condition:

The foundation is in poor condition. The wood building framing rests in the dirt with no or minimal durable foundation elements to support the cabin's walls and floors. Since these wood elements are in direct contact with earth, soil harboring moisture against the wood is causing wood decay fungi to flourish and deteriorate the wood structural elements. This deterioration mechanism is exacerbated by snowmelt against the building which can cause water to run through and around the crawlspace of the building. The floors slope down significantly towards the perimeter and interior bearing walls, indicating that the timber beams supporting the bearing walls are deteriorating and subsiding.

There is extensive cracking (indicative of differential movement) of the concrete topping above the rubble masonry platform. This differential movement and cracking is caused by the un-mortared stones shifting below which could be due to a combination of factors such as frost heave, consolidation of the stones, and differential settlement of the stones. At the west entry stair, the stones have moved and separated from the primary platform. (Re: Figure 25) There is a small tree growing into the topping slab at the south side of the north chimney; tree roots are a conduit for moisture to enter the slab and can cause movement in the slab and masonry below. There is a deteriorated section of concrete that is the result of freeze-thaw cycles.

Recommendations:

- Contract with a geotechnical engineer to provide a soils report on the site to inform the structural design of any new foundation work. (Critical)
- Provide a new reinforced concrete stem wall and footing located at frost depth around the perimeter of the cabin and below the interior bearing walls. (Critical)
- Excavate the crawlspace to provide a minimum of 18" clearance from the bottom of the joists. (Critical)

- Provide new reinforced concrete pad footing that extends to frost depth under the stone chimney. (Critical)
- Remove the tree growing beside the brick chimney and underpin the chimney with a concrete foundation that extends to frost depth. (Critical)
- Disassemble and salvage the stones from the masonry platform. Once the new building foundation is in place, provide a new concrete stem wall and footing at the perimeter of the existing platform and at the stair to match the original elevation of the platform. Construct the stem wall with a ledge and face the outside face of the wall with the salvaged stones above grade. Frame the platform with a concrete slab on galvanized metal deck. Provide new cast-in-place concrete stair to match the existing. (Critical)



Figure 25: Rubble masonry platform and concrete topping at west elevation

3.2.3 Floor and Ceiling Systems

In the original portion of the cabin, the first-floor framing consists of dimensional lumber 2x joists at an unknown spacing spanning in the east-west direction between bearing lines at the west elevation and at the location of the interior wall that separates the original cabin from the kitchen addition. The joists visible during the site visit are supported near their midspan by a stone or wood 2x prop (*Re: Figure 26*). 1x3 tongue and groove flooring acts as both flooring and sheathing, and spans north-south between the floor joists; there is no additional layer of structural subfloor. There is a 6” step up in the floor elevation to the kitchen addition that occurs at the kitchen door threshold. The kitchen floor framing was not visible during the site visit. However, based on the higher grade elevation at the east of the cabin, it is assumed that the floor framing consists of wood sleepers bearing directly on the earth. The sleepers likely run in the east-west direction, which is the shorter dimension of the space. 1x3 tongue and groove flooring spans in the north-south direction in the kitchen. The presence of a structural subfloor is unknown.

At the south fireplace, there is a concrete slab hearth projecting 20" from the south wall and 6" above the finish floor. Its depth is unknown.

The second-floor framing consists of 5 1/2" deep joists spanning in the east-west direction between wood framed bearing walls. The joists are concealed by floor and ceiling finishes so their spacing is unknown. Variable width, 3/4" tongue and groove flooring spans in the north-south direction between the joists. Visible from the first floor below, a 3 1/2" x 3 1/2" dropped wood beam supports the floor joists at approximately the midspan. The north-south beam bears over an opening at the north at the chimney at the south; it is now supported in its middle third by five 2x4 studs that are spaced ranging from 18"-24". There is also a matching 3 1/2" x 3 1/2" dropped beam running east-west. The east-west beam is not structural as it not continuous and runs parallel to the floor framing.

Condition:

The first floor framing is in poor condition. The floor is not level in any of the rooms; it slopes down significantly towards the perimeter of the building and towards the central interior wall that runs in the north-south direction. Limited observation of the condition of the first floor framing members was possible from a small opening at the west elevation. The joists that were visible had areas of water staining and deteriorated wood material was visible at the perimeter of the crawlspace. Water staining is also evident at the northwest corner of the first floor sheathing. A likely cause of the floor slope is rot at the perimeter due to moisture infiltration from wood elements bearing on grade and from snowpack accumulating against the building.

The concrete hearth slab is in good condition; there are no cracks or evidence of differential movement.

The second floor framing is in poor condition. The floor sags significantly at the midspan of the joists. The 3 1/2" x 3 1/2" beam that supports the joists at their midspan spans 14'-5" and is significantly undersized. The temporary stud shoring wall added under the beam is likely a response to the visible deflection. (*Re: Figure 27*) There is not an adequate bearing line to support the added stud shoring wall at the first floor and foundation so, the stud shoring wall further compromises the first floor framing.

Recommendations:

- Further investigation is required to confirm the floor framing configuration and conditions. Remove an area of floor finishes at the first and second floor in order to verify the framing. (Critical)
- Once finishes are removed to confirm the framing condition, evaluate the capacity of the existing first floor joists to support a 100 psf public occupancy live load spanning the full length between bearing walls (ignoring the intermediate rock and wood props). Evaluate the live load capacity of the second floor framing in order to assess load posting options. (Critical)
- The first floor framing of the original cabin is likely significantly undersized for a 100 psf live load; reframe the floor with 2x12 joists spaced at 16". (Critical)

- At the kitchen addition, provide new 2x8 joists @ 16" spanning east-west between the new concrete stem walls. (Critical)
- Preliminary investigation and assumptions indicate that the second floor joists are undersized even for incidental human occupancy. Pending further investigation and analysis, strengthen the second floor framing by sistering each floor joist with members of matching depth. If the capacity of the strengthened floor is still less than the code required live load of 30 psf for habitable attic space, load post and limit occupancy of the second floor.
- Once the second floor joists are strengthened or shored, remove the temporary shoring below.



Figure 26: Examples of first floor framing as seen from a small opening on the west elevation. Note the sporadically placed stone and wood props, and the water staining visible on some of the joists.



Figure 27: Temporary stud shoring wall supporting second floor framing above

3.2.4 Roof Framing System

The Tucker Ranch cabin has a combination of gable and shed roofs. The two-story portion of the building has a gable roof with an 8:12 pitch; the ridge runs in the north-south direction. There are symmetric shed roof dormers on the east and west elevations that intersect with the gable ridge. The kitchen has a shed roof with a 5:12 pitch sloping down to the east. The kitchen has two gable dormers that align with the east exterior wall and they have a 7:12 pitch. The north end of the original cabin has a shed roof with a 3:12 pitch down to the north, intersected by a gable dormer with a 5:12 pitch. None of the roof framing was exposed during the site observation; rafter depth and spacing is unknown. The fascia boards visible at the exterior of the shed roofs are 2x4 dimensional lumber indicating that the rafters are also likely 2x4 dimensional lumber or birdsmouthed 2x6s. At the interior, the ceilings consist of horizontal Dutch lap board sheathing, likely fastened directly to the underside of the rafters. Based on the visible profile of the ceilings, there are no collar or rafter ties in the roof framing. (Re: Figure 28)

Condition:

The roof framing system is in fair to poor condition. The ridge of the main gable roof sags significantly at the center (Re: Figure 24). The eave of the main gable roof bulges out of plane at the top of the wall on the west elevation. Both the ridge sag and the eave bulging are results of rafter thrust from the untied rafter pairs (Re: Figure 23). It appears that the gable roof sags at the location of the dormers on both sides, indicating that the dormer rafters are likely undersized and are overloading the main roof framing.

The was no visible deformation at the other roofs or dormers.

Recommendations:

- Further investigation is required to verify roof framing configuration and conditions. Remove finishes as necessary to verify the framing of each roof. Evaluate the existing framing to support the code required 47 psf roof snow load. (Critical)
- Install a dropped, plied LVL ridge beam to support the rafters and eliminate rafter thrust. Support the ridge beam with a post in each gable end wall to carry the load to the foundation. At the north wall, the post will extend through the opening for the existing second floor door, which is to be abandoned, and land above the door opening at the first floor. Verify or provide a minimum (2)2x6 header with 1 trimmer and 2 king studs to support the additional load. At the south wall, the post will land above the fireplace opening. Here, ensure the fireplace provides an adequate load path for the stud wall above or verify or provide a minimum (2)2x8 header with 1 trimmer and 2 king studs around the fireplace opening. (Critical)
- Sister rafters as required after analysis. Rafters that support dormers likely require sisters. (Critical)
- Remove deteriorated portions of wood framing members. Either sister remaining existing member or replace in kind. (Serious)
- When reroofing, provide a layer of panel sheathing over the top of the existing sheathing. (Critical).

- Install hurricane ties at rafter-top plate connections when framing is accessible during roof work to bolster the diaphragm to wall connection and provide resistance against uplift. (Critical).



Figure 28: Second floor. Note there are no collar or rafter ties at the main gable roof

3.3 BUILDING ENVELOPE - EXTERIOR WALLS

3.3.1 Exterior Wall Construction

The exterior walls of the Tucker Ranch cabin are wood framed bearing walls. The thickness of the wall as measured at the west door opening is approximately 6 1/2". Although the full depth of the wall assembly was not visible, the walls are likely framed with 2x4 studs. The exterior face of the stud wall is sheathed with a layer 1"x 6" vertical boards which are likely attached to blocking between the studs. The vertical boards are faced on the exterior with horizontal Dutch lap siding. The north-south wall separating the kitchen addition from the original portion of the cabin is also a wood framed bearing wall. The interior faces of the walls are sheathed with 1x5 1/2" horizontal boards at the west and south walls of the living room and with 1x5 1/2" horizontal Dutch lap boards in all other locations.

The south chimney is constructed of mortared rubble stone that tapers up from the base. The stone terminates at the level of the cabin roof. From this level, the chimney's brick core extends approximately another 2 feet above the ridge.

The portion of the chimney exposed at the interior of the cabin below the mantle is constructed of clay brick masonry. A single course, shallow, rowlock brick arch frames the fireplace opening. Above the elevation of the mantle, the chimney is separate from and outboard of the exterior stud

wall of the cabin. It is unclear how the stud wall above the mantle is supported over the fireplace. The north chimney is square in plan and constructed of clay brick masonry. The chimney is separate from and outboard of the exterior bearing walls of the cabin, except where the eave of the shed roof intersects the east face of the chimney. The north chimney extends well above the elevation of the roof.

Condition:

The exterior walls are in fair condition. At the base of the walls, the paint is missing, the wood sheathing is discolored, and there are areas of biological growth. All of these ailments are likely resulting from moisture infiltration due to drifted snow against the building, the walls bearing on the earth, and possibly splash-back from gutter-less roof drainage. Because of the prolonged exposure to moisture along the bases of the walls, deterioration fungi may be attacking the bases of the perimeter wood stud walls. At the north end of the west elevation, there is an area of missing exterior siding (Re: Figure 29).

The stone chimney is in poor condition. It is leaning away from the south wall of the building (Re: Figure 30). The gap between the chimney and the south wall is approximately 1 foot at the top of the wall. The chimney has been strapped with ratchet straps to a 2x12 screwed to the south wall of the cabin in two locations: approximately at the height of the second floor and at the mid-height of the second floor windows. The bricks at the top of the chimney are loose; many have fallen and are visible on the ground around the chimney. At the interior, there are significant cracks above the brick arch of the fireplace; the arch has dropped due to the shallowness of the arch without a steel lintel (Re: Figure 31). Many of the clay brick units are fire damaged.

The brick chimney at the northeast of the cabin is in poor condition. The brick in is good condition and the remaining section of the chimney is plumb. The upper portion of the chimney is no longer in place, but its remains are on site nearby. It is possible that the top courses of the remaining chimney are loose.

Recommendations:

- Further investigation is required to confirm the condition of the base of the stud walls. Remove all deteriorated sheathing and finishes around the base of the perimeter of the building and verify the condition of the existing studs. Replace all deteriorated sheathing and siding in kind. If the bottom plate is deteriorated, replace in kind with pressure treated material. If any stud bases are deteriorated, remove the deteriorated portion of the stud and sister the base with a new stud. (Critical)
- Assume some bolstering of wall framing will be necessary once finishes are removed that reveal conditions requiring intervention such as adding headers where none may exist. (Critical)
- Add hold downs at the corners of the stud walls into the foundation to bolster the LFRS. (Critical)
- Verify or provide a minimum (2)2x6 header with 1 trimmer and 2 king studs at the interior wall opening to the kitchen. (Serious)

- Field verify or provide a (2)2x6 header with 1 trimmer and 2 king studs over the door opening beneath the north end of the second floor beam. (Critical)
- Document, label components, and disassemble the stone chimney and fireplace and salvage the material. Once the new chimney foundation is in place, rebuild the chimney using the salvaged stones. Rebuild the brick fireplace at the interior with salvaged bricks. (If the chimney is to be utilized the fireplace should be constructed with firebricks and the flue should be lined in accordance with IBC requirements. Use a curved steel lintel to support the shallow brick arch. Anchor the chimney to the main structure with epoxy-embedded anchor rods in both the east and west walls of the chimney that extend through the wood framed wall of the main structure and (3) bays of framing at the second floor and roof elevations. Install blocking between the joists and rafters adjacent to the rods. Rebuild the brick portion of the chimney above the ridge line. (Critical)
- Rebuild the upper portion of the north brick chimney using the salvaged brick on site. Rake out and repoint the mortar joints of the entire brick chimney. (Critical)



Figure 29: Exterior wall, area of missing siding. Note 2 layers of 1x sheathing.



Figure 30: Stone chimney strapped to south elevation of the cabin. Note gap between cabin and chimney widens along the height indicating outward lean.



Figure 31: Brick fireplace of the south chimney, note arch-shaped cracks above shallow arch

3.3.2 Exterior Finishes

The exterior walls are clad with painted wood drop siding (*Re: Figure 32 and Figure 33*) with a 5 inch exposure. Wood trim including corner boards, eave trim, and casing at the window and door openings is typical. At the window and door openings, 4 inch wide painted wood casing is typical. Painted wood fascia boards are typical on all elevations. At the north section of the building, quarter round painted wood trim is typical at the overhanging eaves. On the east elevation, painted flat wood trim is typical at the overhanging eaves.

On the north and south elevations of the dormers in the west section of the building, the exterior walls are clad with painted diagonal wood plank siding (*Re: Figure 34*).

The exterior siding and trim appears to be original.

Condition:

The lower three to four siding boards on each elevation are deteriorated with extensive paint failure and exposed weathering wood (*Re: Figure 35*). On the west elevation, a section of siding is missing (*Re: Figure 32*). This damage is believed to have been caused by a bear. In this area, approximately four siding boards require replacement. A small area of missing siding was noted to the south of the north door on the west elevation.

At several locations, the painted wood fascia boards are cupped and separating at the joints between boards. At the upper east dormer, the fascia board is split. At the gable dormers, there is separation between boards at the peaks. On the west elevation, the fascia at the south section of the building has areas of warping, likely due to roof drainage across the wood fascia board.

Recommendations:

- Rehabilitate exterior wood siding and trim. (Serious) Rehabilitation should include the following items:
 - Replace missing and severely deteriorated wood components.
 - Complete Dutchman repairs at partially intact wood components.
 - Epoxy repair minor areas of damage at wood components.
 - Prep, prime, and paint exterior siding and trim.
- Rehabilitate wood fascia boards. (Serious) Rehabilitation will likely include partial and complete in-kind replacement of boards depending on the level of deterioration.



Figure 32: Painted wood siding on the west elevation. Note area of damage will require replacement.



Figure 33: Typical exterior wood siding and trim.



Figure 34: Diagonal wood plank siding typical at the sides of the dormer windows.



Figure 35: Deterioration typical at the lower section of the exterior walls

3.3.3 Exterior Masonry

The exterior masonry on the cabin is limited to the masonry site walls, which are addressed in Section 3.1.1 Associated Landscape Features, and the masonry chimneys, which are addressed in Section 3.3.4 Exterior Appendages.

3.3.4 Exterior Appendages – Entrances, Porches, Stoops, Porticos, and Chimneys

The cabin has two chimneys, one located in the center of the south elevation, and one located at the east end of the north elevation.

The chimney in the center of the south elevation is constructed of stone masonry to the underside of the roof eaves. The chimney continues above the eaves, with the upper portion constructed of brick masonry. In photos from 1949, the top of the chimney appears to have a parge coat or cap. (Re: *Figure 36, Figure 37, and Figure 38*)

The chimney at the east end of the north elevation is constructed to the exterior of the building or red brick (Re: *Figure 39 and Figure 40*). This chimney was added at an unknown date to provide venting for the kitchen stove.

Condition:

Both chimneys are in poor condition.

The south chimney is held in place with straps which are anchored to the south elevation of the building (Re: *Figure 36 and Figure 37*). Brick is missing and displaced at the upper section of the south chimney (Re: *Figure 38*). Some of the bricks were noted on site adjacent to the chimney. Extant brick at the top of the chimney is loose and displaced. The lower, stone section of the chimney is in fair condition. Some mortar joints were noted to be deteriorated with sections of missing mortar.

The chimney at the east end of the north elevation is missing the upper section (Re: *Figure 39*). A large portion of it is intact, having fallen onto the roof (Re: *Figure 40*). This section is on site nearby. In photos from 1949, a sheet metal flue is visible at the top of this chimney. The extant brick and mortar at the lower section of the chimney is in fair condition.

Recommendations:

- Rehabilitate the chimney in the center of the south elevation. (Critical) Rehabilitation should include the following items:
 - Document, label, and disassemble chimney as recommended in Section 3.1.1 Exterior Wall Construction. Reassemble chimney to match existing appearance, completing the following recommended items as part of reassembly.
 - Reconstruct upper section of brick.
 - Re-parge the sky-facing surface of the brick.
 - Repoint areas of missing and deteriorated mortar in both the brick and stone masonry sections of the chimney.
 - Clean masonry to remove atmospheric and biologic staining.
 - If the fireplace and chimney will be used, clean flues and inspect all fireplace and chimney components prior to use.
 - If the fireplace and chimney will not be used, install a flat chimney cap.

- Rehabilitate the chimney at the east end of the north elevation. (Critical) Rehabilitation should include the following items:
 - Reconstruct upper section of the brick chimney using extant original materials.
 - Repoint brick masonry where missing and deterioration joints occur.
 - Clean brick masonry to remove atmospheric and biological staining.
 - If the chimney will be used, clean flue and inspect all chimney components prior to use.
 - If the chimney will not be used, install a flat chimney cap.
 - If historic accuracy of appearance is desired, install a sheet metal flue atop the brick chimney.



Figure 36: Overall view of masonry chimney on the south elevation of the cabin.



Figure 37: Upper section of the stone chimney on the south elevation of the cabin.



Figure 38: Detail view of brick condition at the top of the south elevation chimney.



Figure 39: Brick chimney located to the northeast of the building.



Figure 40: Upper section of the brick chimney to the northeast of the building.

3.4 BUILDING ENVELOPE – ROOFING AND WATERPROOFING

3.4.1 Roofing Systems

The west section of the building has a medium-slope gable roof. On the east and west slopes there are shed dormers (*Re: Figure 41 and Figure 42*). The east section of the building has a sloping shed roof which is a continuation of the east slope of the west section. Within the east shed roof there are two gable-roofed dormers. (*Re: Figure 41*) On the north side of the building, there is a shed roof which slopes down toward the north. There is a single gable dormer in the north section of the building.

The roof of the building is covered with wood shingles. Previous layers of wood shingles are visible beneath the top layer. The building has likely always had a wood shingle roof. Remnants of paint were observed on the shingles, in some areas, it appears that the roof shingles were painted red.

Condition:

The wood shingle roof is in poor condition. Missing and loose shingles were noted in several locations (*Re: Figure 43*). The ridge cap at the north dormer on the east side of the building is dented, presumably due to the impact of the upper section of the brick chimney falling on the roof (*Re: Figure 44*). Near the damaged ridge cap, the wood shingles are also damaged as a result of this impact. Adjacent to the south chimney, there is a gap between the chimney and the roof (*Re: Figure 45*). This is likely due to movement of the chimney away from the building.

Recommendations:

- Replace the wood shingle roof. (Critical) When the roof is replaced, the following items should be included:
 - Refer to structural regarding roof framing and sheathing recommendations. Complete roof framing rehabilitation work when re-roofing is completed.
 - Remove all layers of wood shingles down to sheathing.
 - When shingles are removed, complete paint analysis to document any paint colors applied to the various layers of shingles and to determine an appropriate color for new shingles.
 - If sheathing is installed, install cedar breather and ice and water shield.
 - Replace sheet metal flashing. Install flashing in additional locations where necessary to maintain a water-tight condition.
 - Install new wood shingle roofing. Match the appearance of the existing wood shingle roof including shingle size, exposure, pattern, and appearance.
 - If possible, salvage and reinstall original ridge caps. If ridge caps are not salvageable, replace in-kind.



Figure 41: Overall view of the east side of the cabin roof.



Figure 42: Overall view of the west side of the cabin roof.



Figure 43: Detail view of missing shingles on the east slope of the roof.



Figure 44: Roof from the northeast corner of the building. Note area of damage on the gable dormer and ridge cap due to the chimney failure.



Figure 45: Detail view of roof condition adjacent to the south chimney.

3.4.2 Sheet Metal Flashing

Sheet metal flashing is present at the roof valleys (Re: *Figure 46*) and at roof to wall transitions (Re: *Figure 47*). Sheet metal flashing is visible at the roof edge at the brick chimney at the northeast corner of the building.

Condition:

The sheet metal flashing is in fair to poor condition. Where visible, flashing is rusting with areas of deformation visible.

Recommendations:

- Replace sheet metal flashing when the roof is replaced. (Critical)
- Install sheet metal flashing where necessary to maintain a water-tight condition and to protect historic features. (Critical) This may include locations which do not currently have sheet metal flashing including the following:
 - Drip edge flashing at roof edges.
 - Flashing and/or low sheet metal crickets at chimney locations.
- All flashing should be selected and detailed to blend with the historic character, appearance, and materials of the cabin. (Critical)



Figure 46: Detail view of sheet metal valley flashing.



Figure 47: Detail view of flashing at roof to wall transition.

3.4.3 Perimeter Foundation Drainage

The building does not have a perimeter foundation drainage system nor is there evidence of a perimeter foundation drainage system ever having been present on site.

Recommendations:

- Installation of a perimeter foundation drainage system is not recommended at this time.

3.4.4 Drainage System, Gutters, and Downspouts

Gutters and downspouts were not present on the building historically. Currently, there are two sections of half-round gutter located on the east elevation of the building. One section is located at the north end of the east elevation and one is located at the south end of the east elevation. Both are held in place with wire ties. (*Re: Figure 48 and Figure 49*)

Condition:

The extant gutters are in poor condition. The gutters are not securely attached to the building. The finish is worn and areas of rust are present. Both gutters are filled with debris.

Recommendations:

- Installation of additional gutters and downspouts is not recommended as these features were not present historically.
 - Drainage rehabilitation should be undertaken with site grading and establishment of a dry zone around the building. If these measures do not prove to be ample for drainage control, installation of gutters and downspouts may be recommended at that time to protect the historic structure from deterioration due to roof and site drainage.
- Follow recommendations in Section 3.1.2 Grading for site drainage around the building which will also address roof drainage.
- If gutters are deemed necessary along the east side of the building due to site conditions, replace the half-round gutters in-kind. (Serious)
- If gutters remain on the building, clean quarterly to remove dirt and debris build-up. (Routine)



Figure 48: Half round gutter at the north end of the east elevation.



Figure 49: Half round gutter at the south end of the east elevation.

3.4.5 Skylights and Cupolas

The building does not have skylights or cupolas nor is there evidence of these features ever having been present on the building. Installation of skylights and cupolas is not recommended.

3.5 DOORS AND WINDOWS

3.5.1 Exterior Doors, Hardware, Finishes, and Trim

The first floor of the building has four exterior door openings. Two are located in the west elevation, one in the north elevation, and one in the south elevation.

The main entrance is located in the west elevation and provides access into the living room. This opening has an exterior wood framed screen door and an interior wood stile and rail door (*Re: Figure 50 and Figure 51*). The interior door has four panels including an upper glazed opening and three horizontal panels below. The glazed panel has four panes in a two by two configuration. This panel is covered with a metal sign panel for security. Hardware for the door includes a knob with an escutcheon plate and skeleton keyhole, a deadbolt, and a hasp, hook and padlock. The opening has a wood threshold.

To the north of the main entrance is a secondary entrance on the west elevation which provides access into the first floor bedroom. Within this opening there are interior and exterior stile and rail wood doors (*Re: Figure 52 and Figure 53*). The exterior door is a five panel wood door. Hardware at the exterior door includes two surface mounted strap hinges, and a hasp, hook, and padlock. The interior door is a four panel door matching the door at the main entrance. Hardware for the interior door includes a knob with an escutcheon plate and a skeleton keyhole.

The door on the north elevation is boarded up on the exterior. This opening provides access into the kitchen. From the interior, a stile and rail wood door and remnants of a wood framed screen door are visible (*Re: Figure 54*). The extant stile and rail door is a two panel wood door. The opening measures approximately 2 feet 6 inches by 6 feet 2 inches.

The door on the south elevation is boarded up on the exterior, using a door as a cover for the opening (*Re: Figure 55*). This opening provides access into the kitchen. From the interior, a modern flush wood door is visible. The opening measures approximately 2 feet 6 inches by 6 feet 5 inches.

The historic doors for the south opening are not extant. In photos from 1949, an interior stile and rail door with a glazed upper panel and an exterior wood framed screen door are visible.

The second floor of the building has one exterior door opening (*Re: Figure 56 and Figure 57*). This door opening is located in the north elevation. The opening measures approximately 2 feet 1 inch by 4 feet 9 inches. The door is a painted vertical plank wood door. In the upper section of the door there is an opening which was glazed but is now boarded up. The opening included four panes in a two by two configuration. On the interior face of the door there is horizontal wood bracing. Hardware for the door includes a knobbed lockset and two exterior surface mounted hinges. A hinge from a screen door is partially extant on the exterior casing for the opening.

Condition:

The exterior doors are in poor condition. Exterior paint failure and wood deterioration is typical. The most extensive areas of deterioration are typically at the lower exterior rails and lower sections of wood trim. Hardware components are missing at several of the doors. Where extant, hardware is exhibiting areas of rust and deterioration. Daylight is visible around the door openings from the

interior of the building, exhibiting gaps between the door and the frame through which dirt, insects, water, and wind can infiltrate.

The main entrance has one missing pane of glass (*Re: Figure 50 and Figure 51*). One wood panel is duct taped to cover a crack in the wood. The door sweep and weather-stripping are not extant. The exterior screen door has sections of missing and torn screen fabric. The wood components of the screen door are separating.

The exterior door in the opening to the north of the main entrance on the west elevation has split wood panels (*Re: Figure 52 and Figure 53*). The lower panels are missing the exterior layers of wood veneer. The interior door in this opening is in better condition, however, the exterior face was not able to be evaluated and is presumed to be in poor condition.

The north elevation stile and rail door is missing the top rail and the glazing in the upper panel (*Re: Figure 54*). The screen door is missing with the exception of remnants of a painted wood frame.

The south elevation door is not historic nor are the historic doors for this opening extant (*Re: Figure 55*).

The second floor exterior door is missing the glazing in the upper panel. On the exterior of the opening, there is a bent surface mounted strap hinge, which may be indicative of a previous screen door which is no longer extant. (*Re: Figure 56 and Figure 57*)

Recommendations:

- Rehabilitate exterior doors. (Critical) Rehabilitation should include the following:
 - Replace missing and severely damaged wood components.
 - Epoxy repair damaged wood components.
 - Seal joints between components where separation has occurred.
 - Replace missing and broken glazing.
 - Replace missing and deteriorated glazing putty.
 - Replace missing and broken hardware.
 - Prep, prime, and paint interior and exterior wood components.
- Replace non-historic exterior doors with historically appropriate doors. Recreate the historic doors using historic photos where possible. (Minor)
- Replace screen doors.
 - Use extant screen door components and historic photographs to recreate historically appropriate screen doors for the building.



Figure 50: Exterior screen door at the main entrance on the west elevation.



Figure 51: Interior stile and rail wood door at the main entrance on the west elevation.



Figure 52: Exterior door to the north of the main entrance on the west elevation.



Figure 53: Interior view of the door to the north of the main entrance on the west elevation.



Figure 54: Interior view of north elevation door.



Figure 55: Interior view of south elevation door.

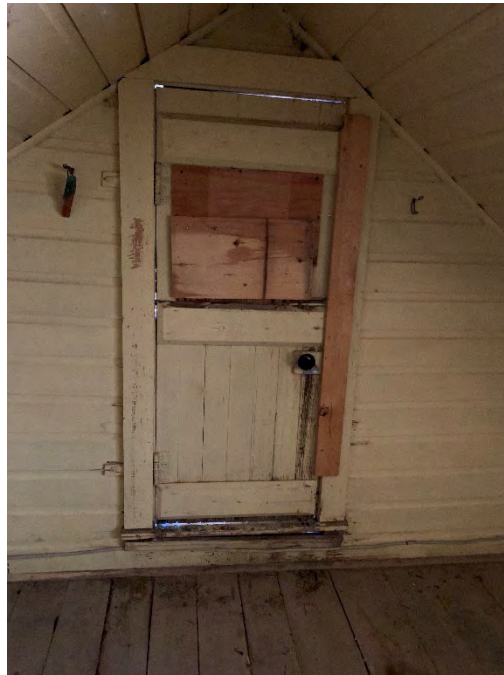


Figure 56: Interior view of second floor door.



Figure 57: Exterior view of second floor door.

3.5.2 Exterior Windows, Hardware, Finishes, and Trim- General

Refer to floor plans for window numbers and locations. With the exception of the dormer windows at the second floor level (windows 201 and 202), each window opening has exterior wood shutters. The exterior shutters are constructed of painted vertical wood beaded board. Each shutter typically has two surface mounted strap hinges on the exterior. On the interior, the shutters have painted horizontal wood braces. Painted exterior wood casing and painted wood sills are typical at the window openings. Between the shutters and the window sashes, wood framed screens are typical. The screens include a small operable section in the lower area, presumably to allow for operation of the shutters from inside the cabin.

Window 101 (*Re: Figure 60*): Window 101 measures approximately 2 feet 3 inches by 3 feet 10 inches and is located at the south end of the west elevation. The window opening measures approximately 2 feet 3 inches by 3 feet 10 inches. The window is a double hung painted wood window. The upper sash has one pane. The lower sash has six panes in a three by two configuration. Hardware for the window includes sash pins.

Window 102 (*Re: Figure 61*): Window 102 measures approximately 2 feet 3 inches by 3 feet 10 inches and is located in the center of the west elevation. The window is a double hung painted wood window. The upper sash does not have any extant glazing. The lower sash has six panes in a three by two configuration. Hardware for the window includes sash pins.

Window 103 (*Re: Figure 62*): Window 103 is located at the north end of the west elevation. The window opening measures approximately 1 foot 10 ½ inches by 2 feet 7 ½ inches. The window is an in-swinging wood casement window with four panes in a two by two configuration. Hardware for the window includes one sash lock and two hinges.

Window 104 (*Re: Figure 63*): Window 104 is located at the west end of the north elevation. The window opening measures approximately 2 feet 10 inches by 1 foot 7 inches. The window is an in-swinging wood awning window with three panes in a three by one configuration. Hardware for the window includes hinges and a turn latch.

Window 105 (*Re: Figure 64*): Window 105 is located at the east end of the north elevation. The window opening measures approximately 2 feet 4 inches by 2 feet 1 inch. The window is an in-swinging wood awning window with six panes in a three by two configuration. Hinges are the only extant hardware. At the interior of the opening, the window is covered with plastic.

Window 106 (*Re: Figure 65*): Window 106 is located at the north end of the east elevation. The window opening measures approximately 2 feet 10 inches by 1 foot 7 inches. The window is an in-swinging wood awning window with three panes in a three by one configuration. Hardware includes two hinges and a sliding latch.

Window 107 (*Re: Figure 66*): Window 107 is located in the center of the east elevation. The window opening measures 1 foot 8 inches by 2 feet. The window is an in-swinging wood awning window with four panes in a two by two configuration. Hinges are the only extant hardware.

Window 108 (*Re: Figure 67*): Window 108 is located at the south end of the east elevation. The

window opening measures 2 feet inches by 1 foot 7 inches. The window is an in-swinging wood awning window. The window has three panes in a three by one configuration. Hardware includes hinges and a sliding latch.

Window 109 (*Re: Figure 68*): Window 109 is located at the east end of the south elevation. The window opening measures approximately 2 feet 5 inches by 2 feet 1 inch. The window is an in-swinging wood awning window. The window originally had six panes in a three by two configuration, though the muntins are no longer all extant.

Window 110 (*Re: Figure 69*): Window 110 is located at the west end of the south elevation. The window measures approximately 2 feet by 4 feet 6 inches. The window is a double hung painted wood window. The upper and lower sashes each have four panes in a two by two configuration. Hardware for the window includes sash pins. At the exterior of the opening, the shutters have been secured in place with a horizontal plank.

Window 201: Window 201 is the west-facing dormer window at the second floor level. The window measures approximately 3 feet by 1 foot 7 inches. The window has three panes in a three by one configuration. The opening is boarded up on the interior.

Window 202 (*Re: Figure 70*): Window 202 is the east-facing dormer window at the second floor level. The window measures approximately 3 feet by 1 foot 7 inches. The window has three panes in a three by one configuration.

Window 203 (*Re: Figure 71*): Window 203 is located at the east end of the south elevation at the second floor level. The window measures approximately 1 foot 9 inches by 2 feet 1 inch. The window has four panes in a two by two configuration.

Window 204: Window 204 is located at the west end of the south elevation at the second floor level. The window measures approximately 1 foot 9 inches by 2 feet 1 inch. The window has four panes in a two by two configuration.

Condition:

The exterior windows are in poor condition. Exterior paint failure and wood deterioration are typical. Glazing putty is missing and deteriorated at most windows. At several openings, interior paint and wood deterioration was noted at the window stools and lower rails. Some of the windows have evidence of previous hardware or previous hardware configurations. Specific areas of more extensive damage and deterioration were noted as follows.

Window 101 has one broken pane of glazing at the lower sash. According to the 1949 photographs, the upper sash in this window had six panes in a three by two configuration.

Window 102 has one broken pane in the lower sash. The upper sash is missing the glass. One exterior shutter is missing a section of wood at the lower corner and one hinge is detached. These conditions have resulted in mis-aligned exterior shutters at the opening.

Window 103 has one cracked pane. The exterior shutters are missing a section of wood in the

middle of the opening.

Window 109 is missing several wood muntins and panes.

Window 110 has a dropped upper sash. One cracked pane was noted. At the exterior of the opening, the painted wood casing at the head is loose.

Window 201 is boarded up on the interior. From the exterior, one broken pane and one missing pane are visible.

Window 202 has one broken pane.

Windows 203 and 204 each have one broken pane of glazing.

Recommendations:

- Rehabilitate wood windows. (Critical) Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Replace broken and missing glazing in kind.
 - Replace deteriorated and missing glazing putty.
 - Seal joints between wood components where separation has occurred.
 - Replace hardware where missing or broken.
 - Install weatherstripping.
 - Prep, prime, and paint wood components.
- Rehabilitate exterior wood shutters. (Critical) Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Install hardware where necessary to secure shutters in place.
 - Prep, prime, and paint wood components.
- Rehabilitate exterior wood framed screens. (Critical) Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Replace screen fabric.
 - Replace hardware where missing or broken.
 - Prep, prime, and paint interior and exterior wood components.



Figure 58: Exterior view of typical shutters.



Figure 59: Exterior view of typical window shutters.



Figure 60: Interior view of Window 101.



Figure 61: Interior view of Window 102.



Figure 62: Interior view of Window 103.



Figure 63: Interior view of Window 104.



Figure 64: Interior view of Window 105.



Figure 65: Interior view of Window 106.



Figure 66: Interior view of Window 107.



Figure 67: Interior view of Window 108.



Figure 68: Interior view of Window 109.



Figure 69: Interior view of Window 110.



Figure 70: Interior view of second floor dormer window.



Figure 71: Interior view of typical south elevation second floor windows.

3.6 INTERIOR FINISHES

3.6.1 Wall Finish Materials

The walls in the first floor living room are covered with horizontal wood planks (*Re: Figure 72*). The horizontal planks continue in the stair at the southeast corner of the room. In the stair, there are signatures and written messages on the planks (*Re: Figure 73 and Figure 74*). On the exterior of the stair opening enclosure, there are vertical wood planks. In the center of the living room there is a 2x4 framed temporary shoring wall.

The north, south, and east walls in the kitchen and north, west, and east first floor bedroom are covered with wood painted drop siding (*Re: Figure 75 and Figure 76*). The south wall in the first floor bedroom and the west wall in the kitchen are finished with painted gypsum board (*Re: Figure 75 and Figure 77*).

Throughout the second floor bedroom, the walls are clad with wood painted drop siding (*Re: Figure 78*).

Condition:

The wall finishes throughout the building are in good condition unless otherwise noted. Minor areas of wear and damage due to use were observed throughout the building. Damage from kitchen chairs was noted in the south section of the kitchen. Water damage was noted at the lower section of the north wall of the first floor bedroom (*Re: Figure 76*).

The wall finish in the second floor bedroom is water damaged below the north door (*Re: Figure 79*) and at the dormer window sills.

Recommendations:

- Address all water infiltration prior to rehabilitation of interior finishes.
- Retain the messages and signatures on the wood plank wall in the stair. (Routine)
- Rehabilitate wood drop siding wall finish. (Minor) Rehabilitation should include the following:
 - Repair areas of wood damage.
 - Replace severely damaged wood components in kind.
 - Prep, prime, and paint wood components.



Figure 72: Horizontal wood plank wall finish in the first floor living room.

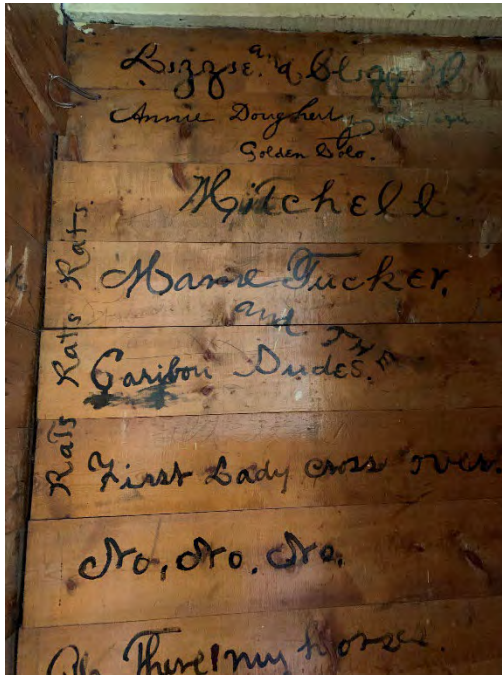


Figure 73: Signatures and messages on the wood plank wall finish in the stair.



Figure 74: Signatures and messages on the wood plank wall finish in the stair.



Figure 75: Overall view of the kitchen facing south.



Figure 76: Wall and floor finishes in the first floor bedroom.



Figure 77: Gypsum board wall finish on the south wall of the first floor bedroom.



Figure 78: Overall view of finishes in the second floor bedroom.



Figure 79: Water damage below the threshold at the second floor door opening.

3.6.2 Ceiling Finish Materials

The ceiling in the living room is finished with painted gypsum board (*Re: Figure 80*). Painted wood beams are visible running east-west and north-south, crossing in the center of the room. The gypsum board ceiling material in the living room was tested and found to be an asbestos containing material.

The ceilings in the kitchen and first floor bedroom are sloped, following the slope of the roof framing. The ceilings in these rooms are finished with painted wood drop siding. (*Re: Figure 81*)

The second floor ceiling is sloped, following the angles of the roof and dormer framing. The ceiling height at the second floor level is highest in the center, measuring 6 feet from finished floor to the ridge. The ceiling is finished with painted wood drop siding. (*Re: Figure 82*)

Condition:

The ceiling finishes throughout the cabin are in good condition. Areas of minor wear are visible. In the kitchen, one dormer has an area of paint wear, possibly due to the low head clearance in close proximity to the current location of the dining table.

Recommendations:

- Rehabilitate wood drop siding ceiling finishes throughout the building. (Minor)
Rehabilitation should include the following:
 - Repair areas of minor damage and wear.
 - Prep, prime, and paint ceilings.
- If the living room ceiling is disturbed for rehabilitation activities, complete necessary abatement of asbestos containing materials. (Critical)
 - If the living room ceiling finish is removed, document any newly exposed historic finish materials and, if possible, rehabilitate historic finishes.
 - If the living room ceiling is removed and no historic finishes are uncovered, install new finishes which are historically appropriate for the building.



Figure 80: Overall view of ceiling finish in the living room.



Figure 81: Ceiling finish in the first floor bedroom dormer.



Figure 82: Ceiling finish typical in the second floor bedroom.

3.6.3 Floor Finish Materials

The flooring throughout the first floor is painted wood tongue and groove flooring. The boards typically measure 3 ½ inches wide. In the living room and kitchen there are sheet vinyl / linoleum ‘rugs.’ (Re: *Figure 83 and Figure 84*)

The floor throughout the second floor is painted wood plank flooring. The planks measure approximately 8 inches wide. (Re: *Figure 85*)

Condition:

The wood flooring throughout the first floor is in fair condition (Re: *Figure 83 and Figure 84*). Areas of wear and finish deterioration are typical. Some separation between boards was noted. The paint finish on the boards is worn off in most locations.

At the north end of the kitchen, snow was observed inside the building on the floor (Re: *Figure 86*). This is likely a result of the poor condition of the nearby door and gaps in the exterior finishes. If not addressed, this condition will lead to on-going deterioration of the wood flooring materials.

In the kitchen, there is a joint between slightly different wood flooring areas (Re: *Figure 87*). This might be indicative of previously repaired or replaced areas of flooring.

In the first floor bedroom, an area of water damage was observed along the north wall (Re: *Figure 76*).

The linoleum ‘rugs’ in the living room and kitchen are in poor condition. Areas of tearing and deterioration are typical with sections missing, particularly along the edges of the material. Due to the level of deterioration, these ‘rugs’ may not be able to be salvaged and restored.

The wood plank flooring throughout the second floor is in fair condition (Re: *Figure 85*). Paint finish deterioration is typical. In some locations, planks are separating. In one location, a portion of a plank is loose, and appears to have been previously removed. The floor has a sag in it, which may be indicative of a structural issue. Wood shoring has been installed beneath to address this issue.

Recommendations:

- Address all structural concerns with the second floor structure prior to re-finishing the wood plank flooring. (Critical)
- Address all locations of water infiltration prior to rehabilitation of interior finishes. (Critical)
- Refinish the wood floor throughout the first floor. (Serious)
- Refinish the wood plank floor in the second floor bedroom. (Serious)
- Assuming linoleum rugs are not able to be rehabilitated, document the material prior to removal from the building and retain documentation as part of the history of the building. (Serious)



Figure 83: Painted wood flooring typical throughout the first floor. Note linoleum 'rug' visible in the lower section of the photo.



Figure 84: Painted wood flooring in the kitchen visible to the top in the photo. Note step down to living room and wood floor with linoleum 'rug' in the lower section of the photo.



Figure 85: Wood plank flooring in the second floor bedroom.



Figure 86: Snow observed in the kitchen.



Figure 87: Joint noted in kitchen flooring.

3.6.4 Interior Doors and Hardware

There are two interior doors in the building, both located on the first floor level.

One interior door provides access between the living room and the bedroom (*Re: Figure 88 and Figure 89*). This door is constructed of vertical beaded board, with ‘Z’ bracing on the bedroom side of the door. Hardware for the door includes two ball tipped hinges, a knob, and a surface mounted lock with a skeleton keyhole.

The other interior door is located between the bedroom and the kitchen (*Re: Figure 90*). The door has been blocked on the kitchen side with gypsum hardboard (*Re: Figure 91*). The door is constructed of painted vertical wood planks with horizontal bracing. Extant hardware includes two surface mounted strap hinges and a turn latch.

Condition:

The interior doors are in fair condition. Areas of finish wear and minor damage to wood components are typical. The knob on the door between the first floor bedroom and the living room is loose. Some separation is present between the planks in the door from the first floor bedroom into the kitchen. The door has been modified at the bottom to accommodate electrical distribution into the kitchen.

Recommendations:

- Retain the historic interior doors. (Routine)
- Rehabilitate the interior wood doors. (Minor) Rehabilitation should include the following items:
 - Repair areas of minor wood damage.
 - Resecure hardware.
 - Prep, prime, and paint wood components.
- If an opening between the kitchen and the first floor bedroom is re-established, reconstruct the door for the opening to restore the lower section of the door to its original appearance. (Minor)



Figure 88: Door located between the first floor bedroom and the living room.



Figure 89: Door located between the first floor bedroom and living room.



Figure 90: Door located between the first floor bedroom and the kitchen.



Figure 91: Door opening between the first floor bedroom and the kitchen.

3.6.5 Interior Windows and Hardware

The building does not have any interior windows. Installation of interior windows is not recommended.

3.6.6 Interior Trim and Built-ins

In the center of the south wall of the living room there is a fireplace which includes a stone hearth, a brick surround and firebox, and wood trim and a wood mantle (*Re: Figure 92*).

Throughout the living room, a painted 7 inch high flat wood base with a painted quarter-round base shoe is typical (*Re: Figure 93*).

In the southeast corner of the living room, there are steps which provide access to a landing from which there is a ladder to access the second floor. The stair is approximately 24 inches wide. The risers and treads are painted wood (*Re: Figure 94*).

Throughout the kitchen and bedroom, painted quarter-round base trim is typical. Painted quarter round trim is also typical at the corners of the walls and ceilings. (*Re: Figure 75 and Figure 76*)

In the northwest corner of the kitchen, there are built-in painted wood cabinets.

Throughout the second floor, painted quarter-round wood trim is typical at the wall base and at the wall to ceiling joints.

Along the east wall of the second floor, there are built-in storage areas including a built-in painted wood dresser within the dormer window area. The casework projects into the room approximately 2 feet 2 inches and is located approximately 11 inches from the ladder opening. To either side of the dresser there are painted beaded board doors which provide access to additional storage. (*Re: Figure 95, Figure 96, and Figure 97*)

Condition:

The interior trim and built-ins are in good condition unless otherwise noted. General prepping, priming, and painting is recommended to address areas of minor deterioration and damage to painted wood trim components.

The fire place is in fair condition (*Re: Figure 92*). Areas of the brick above and inside the firebox are soot stained. Cracks and mortar deterioration were noted at the brick surrounding the firebox.

Recommendations:

- Rehabilitate the fireplace in the living room. (Serious) Rehabilitation should include the following items:
 - Clean firebox to remove staining.
 - Repoint brick at surround and firebox.
 - Clean flue to remove any debris.
 - If fireplace will not be used, install a cap.
- Prep, prime, and paint wood trim at areas of wear and deterioration. (Minor)



Figure 92: Overall view of fireplace located in the south wall of the living room.



Figure 93: Painted wood base trim typical in the living room.



Figure 94: Painted wood casing, trim, and stairs located in the living room.



Figure 95: Second floor storage area.



Figure 96: Dresser located in second floor dormer.



Figure 97: Storage area located in the second floor bedroom.

3.7 MECHANICAL SYSTEMS

3.7.1 Heating and Air Conditioning Systems

Historically, the heat for the building was provided with the fireplace. The building does not currently have heat or air conditioning. The building will have limited seasonal use and installation of heat and air conditioning is not anticipated.

Recommendations:

- If heat or air conditioning is installed, these systems should be installed in a manner which minimizes impact to the historic appearance, character, and materials of the building. (Routine)
- If any use of the fireplace is anticipated or desired, complete all rehabilitation, including disassembly and reconstruction, of the chimney prior to reuse. (Critical)

3.7.2 Ventilation Systems

Ventilation in the building was historically accomplished with operable windows. There is no mechanical ventilation system in the building.

Recommendations:

- Rehabilitate exterior windows to operable condition as outlined in Section 3.5.2 Exterior Windows.
- Given the limited use of the building anticipated, installation of mechanical ventilation is not recommended. If additional use is desired in the future, mechanical ventilation may be necessary, particularly if a cooking space in the kitchen is re-established. If a ventilation system is installed, it should be installed in a manner which minimizes impact to the historic appearance, character, and materials of the building. (Routine)

3.7.3 Water Service, Plumbing and Sewer Utilities

The cabin does not have water service, plumbing, or sewer utilities nor were these systems present historically. Installation of these systems is not anticipated or recommended.

3.7.4 Fire Suppression - Sprinklers

The cabin does not have a fire suppression system. No fire extinguishers were noted in the building.

Recommendations:

- Install and maintain a fire extinguisher in the building. (Critical)

3.8 ELECTRICAL SYSTEMS

3.8.1 Electrical Service and Panels

The building does not have active electrical service. Electrical service will be needed. Inactive electrical equipment is located on the north elevation of the building and on the north wall of the kitchen. (Re: *Figure 98 and Figure 99*)

Condition:

The electrical service and panel is not currently active. The date of installation is unknown.

Recommendations:

- Engage a well-qualified electrical engineer to review the existing system components and to provide recommendations and design for installation of electrical service and panels for the building. (Serious)



Figure 98: Electrical service equipment on the north elevation.



Figure 99: Electrical panel and distribution on the north wall of the kitchen.

3.8.2 Electrical Distribution System

Electrical distribution is exposed throughout the cabin. The wiring is insulated and is surface mounted on walls and ceilings, distributing power to receptacles and fixtures throughout the cabin. The date of installation is unknown; given the likely age of the electrical system components, it should be presumed to be non-code compliant and in need of full replacement.

Recommendations:

- Engage a well-qualified electrical engineer to review the electrical distribution system and to provide recommendations and design for installation of a new electrical distribution system. (Critical)

3.8.3 Lighting

3.8.3.1 Exterior Lighting

There are no functional lights on the exterior of the building. On the west elevation, there is a mounting plate for a light fixture above the door which provides access into the living room (*Re: Figure 100*). A similar mounting plate is located above the exterior door on the south elevation. At the east end of the north elevation there is one non-historic single-lamp spotlight fixture (*Re: Figure 101*).

Condition:

There are no functional light fixtures on the exterior of the building. The fixture is missing above the west entrance into the living room. The fixture at the east end of the north elevation is not active. This fixture is not historic and is in poor condition. Areas of deterioration and wear are typical on the mounting plate.

Recommendations:

- Install new historically appropriate high efficiency light fixtures at building entrances. New light fixtures should be simple in design and should complement the historic character and appearance of the building. (Minor)
- If additional site lighting is desired or necessary for security or site access, select fixtures which are simple in design and complement the historic character and appearance of the site and building. (Minor)



Figure 100: Light fixture location above the living room entrance on the west elevation.



Figure 101: Modern single lamp light fixture located at the east end of the north elevation.

3.8.3.2 Interior Lighting

Interior lighting is limited to bare lamp fixtures with ceramic mounting plates. Fixtures of this nature are located in the first and second floor spaces (Re: *Figure 102, Figure 103, Figure 104, and Figure 105*). Given the date of construction of the building, these fixtures may be the only fixtures that were ever in the building. None of the fixtures are historically significant.

Condition:

The interior light fixtures are not functional as electrical service is not active to the building. Given the unknown age and condition of the electrical distribution system and associated devices, replacement of all wiring and fixtures is recommended.

Recommendations:

- Replace interior light fixtures with new, high efficiency LED fixtures. New fixtures should be simple in design and should complement the historic appearance, character, and materials in the building. (Serious)



Figure 102: Light fixture located in the center of the living room ceiling.



Figure 103: Light fixture located in the kitchen.



Figure 104: Light fixture located in the kitchen.



Figure 105: Light fixture located in the second floor bedroom.

3.8.4 Fire Detection System

The cabin does not have a fire detection system. No smoke detectors were noted in the building.

Recommendations:

- Install smoke detectors in the building. Consider installation of an annunciated system which would alert the local fire department of any issues when the building is unoccupied.

3.8.5 Security Alarm System

The cabin does not have a security alarm system.

Recommendations:

- If a security alarm system is desired, it should be installed in a manner which minimizes impact to the historic appearance, materials, and character of the building. (Routine)

4.0 ANALYSIS AND COMPLIANCE

4.1 *Hazardous Materials – Summary*

A specific hazardous materials survey was not included as part of the scope of this assessment. Testing for asbestos and lead-based paint was completed in 2022 by Terracon.

The following materials were tested for asbestos:

- Brown/black tar paper flooring with black felt (living room)
- White ceiling texture (living room)
- White gypsum board (south bedroom and kitchen)
- Gray flue packing (kitchen)
- Red brick and white mortar (living room)
- Red brick and white mortar (southwest exterior chimney)
- White window glazing (kitchen, dining room, and south bedroom)
- Brown vapor barrier (east exterior)
- Yellow and white insulation (upper level floor of cabinets)

Of the areas listed above, the living room ceiling and white window glazing were the only materials determined to be asbestos containing. The white ceiling texture in the living room has significant enough asbestos content that it would require abatement if the area will be disturbed. The white window glazing has less than 1% asbestos, and would need to be addressed in compliance with OSHA regulations.

Lead based paint testing was also completed throughout the interior and exterior of the building. Lead based paint is present throughout the interior and exterior. Any future maintenance procedures or construction activities that would involve sanding or heating existing paint coatings should consider the presence of lead-based paint.

Recommendations:

- If rehabilitation activities are planned which impact asbestos containing materials, follow recommendations and requirements for abatement as well as applicable OSHA and EPA guidelines. (Routine)
- Handle materials containing lead-based paint according to EPA and OSHA regulations during rehabilitation activities. (Routine)

4.2 *Materials Analysis*

Materials analysis was completed as part of this assessment for brick and stone mortar. The results of the materials testing are located in the appendix of this document.

Mortar analysis was completed for the brick and stone masonry chimneys. Mortar type L is recommended as a replacement for the stone masonry mortar. Mortar type K is recommended as a replacement for the brick masonry mortar.

Limited paint analysis was completed to determine an appropriate early color scheme for the

5.0 PRESERVATION PLAN

The Secretary of the Interior's Standards for the Treatment of Historic Properties describe several treatment approaches for historic buildings. The treatment approaches are preservation, rehabilitation, restoration, and reconstruction.

Preservation focuses on the maintenance and repair of existing historic materials and repair of existing historic materials and retention of a historic property's form as it has evolved over time. Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon 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.

Preservation is appropriate as a treatment when the property's distinctive materials, features and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations.

Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. 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. Rehabilitation is appropriate as a treatment when repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate.

Rehabilitation is an appropriate approach for the building. The standards for rehabilitation are:

A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

Changes to a property that have acquired historic significance in their own right will be retained and preserved.

Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

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.

Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment will be unimpaired.

Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods. 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. Restoration is not an appropriate treatment for the entire building, primarily due to economic constraints, a lack of documentation regarding the original appearance, and alterations which have already occurred to the building.

Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes. Reconstruction is not an appropriate treatment for the building.

5.1 PRIORITIZED WORK PLAN

The purpose of this preservation plan is to organize the physical repair, maintenance and rehabilitation needs of the building into a prioritized approach that will allow the building Owner to anticipate and plan for repair, rehabilitation, and major maintenance costs. Each problem condition discovered during the building condition assessment is evaluated and positioned according to its severity and impact on the long-term conservation of the building, the safety of its occupants and the continued use of the building. Recommended repair, rehabilitation and maintenance work is prioritized and organized into the following categories according to their relative urgency and importance.

Critical Deficiencies: This category includes deficiencies that should be corrected as soon as possible. If repairs are not made immediately, serious additional damage to the building or potential injury to the building's occupants or passers-by is likely to occur. Work which would be classified as critical deficiencies include masonry components which have deteriorated to the point where pieces could fall and injure the building's occupants and/or passers-by, serious active roof leaks that could quickly damage the building or its contents, hazardous electrical conditions, hazardous building egress conditions and the like. Critical building code and related life safety deficiencies are also included in this category.

Serious Deficiencies: This category includes deficiencies that should be corrected as soon as possible after all critical deficiencies have been corrected. This category includes work in areas where continuing damage to the building is likely unless the problems are repaired. Serious deficiencies could become critical deficiencies if not corrected in 2 to 5 years. Work which would be classified as serious deficiencies includes repair of roof leaks and conditions likely to result in roof leaks, repair work which will prevent significant and rapid additional deterioration of building components and systems, etc.

Minor Deficiencies: This category includes deficiencies that should be corrected but not before all deficiencies in the critical and serious categories has been completed. Minor deficiencies have the potential of becoming serious if not corrected and resolved within the next 5 to 10 years.

Routine Repair Work: This category includes repair work that should be done on a routine and continuous basis or is a routine part of any rehabilitation project. If routine repair and maintenance is not completed, building components and systems can deteriorate into critical or serious deficiencies.

5.1.1 Critical Deficiencies (Immediate Action Required.)

The following critical deficiencies should be corrected as soon as possible.

- Rehabilitate the raised walkway / patio area around the building. Rehabilitation should include the following items:
 - Coordinate with structural rehabilitation work necessary at the foundation of the cabin and the patio area to ensure all areas of work are addressed prior to re-pouring the concrete slab.
 - Replace areas of missing, cracked, and spalled concrete to match the existing materials.
 - Reset loose and displaced stone and repoint stone walls.
 - Preserve historic features of the patio and wing walls including date-stamped concrete adjacent to the stair.
- Fill the gaps between the cabin and adjacent concrete walks.
- Establish a well-graded drainage swale along the east side of the building. Consider paving the area with concrete to allow for easy clean-out of debris and to facilitate the flow of water out of this area of the site.
- Re-grade site where necessary to ensure positive drainage away from the building.
 - Note that a site survey may be required in order to complete full site drainage design work.
 - Engage a well-qualified civil engineer to complete site drainage design.
- Fill gaps at door thresholds to eliminate water flow from pavement adjacent to the building into the area beneath the building.
- Contract with a geotechnical engineer to provide a soils report on the site to inform the structural design of any new foundation work.
- Remove the tree growing beside the brick chimney and underpin the chimney with a concrete foundation that extends to frost depth.
- Disassemble and salvage the stones from the masonry platform. Once the new building foundation is in place, provide a new concrete stem wall and footing at the perimeter of the existing platform and at the stair to match the original elevation of the platform. Construct the stem wall with a ledge and face the outside face of the wall with the salvaged stones above grade. Frame the platform with a concrete slab on galvanized metal deck. Provide new cast-in-place concrete stair to match the existing.
- Provide a new reinforced concrete stem wall and footing located at frost depth around the perimeter of the cabin and below the interior bearing walls.
- Excavate the crawlspace to provide a minimum of 18” clearance from the bottom of the joists.
- Provide new reinforced concrete pad footing that extends to frost depth under the stone chimney.
- Further investigation is required to confirm the floor framing configuration and conditions. Remove an area of floor finishes at the first and second floor in order to verify the framing.
- Once finishes are removed to confirm the framing condition, evaluate the capacity of the existing first floor joists to support a 100 psf public occupancy live load spanning the full

length between bearing walls (ignoring the intermediate rock and wood props). Evaluate the live load capacity of the second floor framing in order to assess load posting options.

- The first floor framing of the original cabin is likely significantly undersized for a 100 psf live load; reframe the floor with 2x12 joists spaced at 16”.
- At the kitchen addition, provide new 2x8 joists @ 16” spanning east-west between the new concrete stem walls.
- Preliminary investigation and assumptions indicate that the second floor joists are undersized even for incidental human occupancy. Pending further investigation and analysis, strengthen the second floor framing by sistering each floor joist with members of matching depth. If the capacity of the strengthened floor is still less than the code required live load of 30 psf for habitable attic space, load post and limit occupancy of the second floor.
- Once the second floor joists are strengthened or shored, remove the temporary shoring below.
- Further investigation is required to verify roof framing configuration and conditions. Remove finishes as necessary to verify the framing of each roof. Evaluate the existing framing to support the code required 47 psf roof snow load.
- Install a dropped, plied LVL ridge beam to support the rafters and eliminate rafter thrust. Support the ridge beam with a post in each gable end wall to carry the load to the foundation. At the north wall, the post will extend through the opening for the existing second floor door, which is to be abandoned, and land above the door opening at the first floor. Verify or provide a minimum (2)2x6 header with 1 trimmer and 2 king studs to support the additional load. At the south wall, the post will land above the fireplace opening. Here, ensure the fireplace provides an adequate load path for the stud wall above or verify or provide a minimum (2)2x8 header with 1 trimmer and 2 king studs around the fireplace opening.
- Sister rafters as required after analysis. Rafters that support dormers likely require sisters.
- When reroofing, provide a layer of panel sheathing over the top of the existing sheathing.
- Install hurricane ties at rafter-top plate connections when framing is accessible during roof work to bolster the diaphragm to wall connection and provide resistance against uplift.
- Further investigation is required to confirm the condition of the base of the stud walls. Remove all deteriorated sheathing and finishes around the base of the perimeter of the building and verify the condition of the existing studs. Replace all deteriorated sheathing and siding in kind. If the bottom plate is deteriorated, replace in kind with pressure treated material. If any stud bases are deteriorated, remove the deteriorated portion of the stud and sister the base with a new stud.
- Assume some bolstering of wall framing will be necessary once finishes are removed that reveal conditions requiring intervention such as adding headers where none may exist.
- Field verify or provide a (2)2x6 header with 1 trimmer and 2 king studs over the door opening beneath the north end of the second floor beam.
- Add hold downs at the corners of the stud walls into the foundation to bolster the LFRS.
- Document, label components, and disassemble the stone chimney and fireplace and salvage the material. Once the new chimney foundation is in place, rebuild the chimney using the

salvaged stones. Rebuild the brick fireplace at the interior with salvaged bricks. (If the chimney is to be utilized the fireplace should be constructed with firebricks and the flue should be lined in accordance with IBC requirements. Use a curved steel lintel to support the shallow brick arch. Anchor the chimney to the main structure with epoxy-embedded anchor rods in both the east and west walls of the chimney that extend through the wood framed wall of the main structure and (3) bays of framing at the second floor and roof elevations. Install blocking between the joists and rafters adjacent to the rods. Rebuild the brick portion of the chimney above the ridge line.

- Rebuild the upper portion of the north brick chimney using the salvaged brick on site. Rake out and repoint the mortar joints of the entire brick chimney.
- Rehabilitate the chimney in the center of the south elevation. Rehabilitation should include the following items:
 - Document, label, and disassemble chimney as recommended in Section 3.1.1 Exterior Wall Construction. Reassemble chimney to match existing appearance, completing the following recommended items as part of reassembly.
 - Reconstruct upper section of brick.
 - Re-parge the sky-facing surface of the brick.
 - Repoint areas of missing and deteriorated mortar in both the brick and stone masonry sections of the chimney.
 - Clean masonry to remove atmospheric and biologic staining.
 - If the fireplace and chimney will be used, clean flues and inspect all fireplace and chimney components prior to use.
 - If the fireplace and chimney will not be used, install a flat chimney cap.
- Rehabilitate the chimney at the east end of the north elevation. Rehabilitation should include the following items:
 - Reconstruct upper section of the brick chimney using extant original materials.
 - Repoint brick masonry where missing and deterioration joints occur.
 - Clean brick masonry to remove atmospheric and biological staining.
 - If the chimney will be used, clean flue and inspect all chimney components prior to use.
 - If the chimney will not be used, install a flat chimney cap.
 - If historic accuracy of appearance is desired, install a sheet metal flue atop the brick chimney.
- Replace the wood shingle roof. When the roof is replaced, the following items should be included:
 - Refer to structural regarding roof framing and sheathing recommendations. Complete roof framing rehabilitation work when re-roofing is completed.
 - Remove all layers of wood shingles down to sheathing.
 - When shingles are removed, complete paint analysis to document any paint colors applied to the various layers of shingles and to determine an appropriate color for new shingles.
 - If sheathing is installed, install cedar breather and ice and water shield.
 - Replace sheet metal flashing. Install flashing in additional locations where necessary to maintain a water-tight condition.

- Install new wood shingle roofing. Match the appearance of the existing wood shingle roof including shingle size, exposure, pattern, and appearance.
 - If possible, salvage and reinstall original ridge caps. If ridge caps are not salvageable, replace in-kind.
- Replace sheet metal flashing when the roof is replaced.
- Install sheet metal flashing where necessary to maintain a water-tight condition and to protect historic features. This may include locations which do not currently have sheet metal flashing including the following:
 - Drip edge flashing at roof edges.
 - Flashing and/or low sheet metal crickets at chimney locations.
- All flashing should be selected and detailed to blend with the historic character, appearance, and materials of the cabin.
- Rehabilitate exterior doors. Rehabilitation should include the following:
 - Replace missing and severely damaged wood components.
 - Epoxy repair damaged wood components.
 - Seal joints between components where separation has occurred.
 - Replace missing and broken glazing.
 - Replace missing and deteriorated glazing putty.
 - Replace missing and broken hardware.
 - Prep, prime, and paint interior and exterior wood components.
- Replace screen doors.
 - Use extant screen door components and historic photographs to recreate historically appropriate screen doors for the building.
- Rehabilitate wood windows. Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Replace broken and missing glazing in kind.
 - Replace deteriorated and missing glazing putty.
 - Seal joints between wood components where separation has occurred.
 - Replace hardware where missing or broken.
 - Install weatherstripping.
 - Prep, prime, and paint wood components.
- Rehabilitate exterior wood shutters. Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Install hardware where necessary to secure shutters in place.
 - Prep, prime, and paint wood components.
- Rehabilitate exterior wood framed screens. Rehabilitation should include the following items:
 - Replace missing and severely damaged wood components.
 - Epoxy repair deteriorated wood components.
 - Replace screen fabric.
 - Replace hardware where missing or broken.
 - Prep, prime, and paint interior and exterior wood components.

- If the living room ceiling is disturbed for rehabilitation activities, complete necessary abatement of asbestos containing materials.
 - If the living room ceiling finish is removed, document any newly exposed historic finish materials and, if possible, rehabilitate historic finishes.
 - If the living room ceiling is removed and no historic finishes are uncovered, install new finishes which are historically appropriate for the building.
- Address all structural concerns with the second floor structure prior to re-finishing the wood plank flooring.
- If any use of the fireplace is anticipated or desired, complete all rehabilitation, including disassembly and reconstruction, of the chimney prior to reuse.
- Install and maintain a fire extinguisher in the building.
- Engage a well-qualified electrical engineer to review the electrical distribution system and to provide recommendations and design for installation of a new electrical distribution system.

5.1.2 Serious Deficiencies (Action Required 2 - 5 Years)

Serious deficiencies should be corrected after all critical deficiencies have been corrected and within the next 2 to 4 years.

- Rehabilitate the stone retaining wall to the east of the building.
 - Consult with civil and structural engineers to determine if additional reinforcement and stabilization is necessary in this location prior to rehabilitation of the stone. A concrete retaining wall faced with stone may be necessary to stabilize the site in this area.
 - Restack stone where displacement has occurred.
 - Replace stone in-kind where missing or damaged.
- Establish full access to the historic driveway on site. Note that this will require coordination with the property owner to the north.
- Remove deteriorated portions of wood framing members. Either sister remaining existing member or replace in kind.
- Verify or provide a minimum (2)2x6 header with 1 trimmer and 2 king studs at the interior wall opening to the kitchen.
- Rehabilitate exterior wood siding and trim. Rehabilitation should include the following items:
 - Replace missing and severely deteriorated wood components.
 - Complete Dutchman repairs at partially intact wood components.
 - Epoxy repair minor areas of damage at wood components.
 - Prep, prime, and paint exterior siding and trim.
- Rehabilitate wood fascia boards. Rehabilitation will likely include partial and complete in-kind replacement of boards depending on the level of deterioration.
- If gutters are deemed necessary along the east side of the building due to site conditions, replace the half-round gutters in-kind.
- Refinish the wood floor throughout the first floor.
- Refinish the wood plank floor in the second floor bedroom.
- Assuming linoleum rugs are not able to be rehabilitated, document the material prior to

removal from the building and retain documentation as part of the history of the building.

- Rehabilitate the fireplace in the living room. Rehabilitation should include the following items:
 - Clean firebox to remove staining.
 - Repoint brick at surround and firebox.
 - Clean flue to remove any debris.
 - If fireplace will not be used, install a cap.
- Engage a well-qualified electrical engineer to review the existing system components and to provide recommendations and design for installation of electrical service and panels for the building.
- Replace interior light fixtures with new, high efficiency LED fixtures. New fixtures should be simple in design and should complement the historic appearance, character, and materials in the building.
- Install smoke detectors in the building. Consider installation of an annunciated system which would alert the local fire department of any issues when the building is unoccupied.

5.1.3 Minor Deficiencies (Action Required 5 - 10 Years)

- Replace non-historic exterior doors with historically appropriate doors. Recreate the historic doors using historic photos where possible.
- Rehabilitate wood drop siding wall finish. Rehabilitation should include the following:
 - Repair areas of wood damage.
 - Replace severely damaged wood components in kind.
 - Prep, prime, and paint wood components.
- Rehabilitate wood drop siding ceiling finishes throughout the building. Rehabilitation should include the following:
 - Repair areas of minor damage and wear.
 - Prep, prime, and paint ceilings.
- Rehabilitate the interior wood doors. Rehabilitation should include the following items:
 - Repair areas of minor wood damage.
 - Resecure hardware.
 - Prep, prime, and paint wood components.
- If an opening between the kitchen and the first floor bedroom is re-established, reconstruct the door for the opening to restore the lower section of the door to its original appearance.
- Prep, prime, and paint wood trim at areas of wear and deterioration.
- Install new historically appropriate high efficiency light fixtures at building entrances. New light fixtures should be simple in design and should complement the historic character and appearance of the building.
- If additional site lighting is desired or necessary for security or site access, select fixtures which are simple in design and complement the historic character and appearance of the site and building.
- Once vehicular site access is established, create an ADA compliant path to the building.
 - Establish an ADA compliant parking space.
 - Establish an ADA compliant path to the south and west elevations of the building.
 - Establish an ADA compliant building entrance to allow for access into the building.Due to the step between the kitchen and the living room, two access points are

anticipated.

- Maintain an ADA compliant path adjacent to the building to the greatest extent possible.

5.1.4 Routine Recommendations

- Retain the shed and outhouse to the north of the cabin.
- Follow the archaeological guidelines required by the Office of Archaeology and Historic Preservation for all construction activities which disturb the ground on the site.
- If gutters remain on the building, clean quarterly to remove dirt and debris build-up.
- Retain the messages and signatures on the wood plank wall in the stair.
- Retain the historic interior doors.
- If heat or air conditioning is installed, these systems should be installed in a manner which minimizes impact to the historic appearance, character, and materials of the building.
- Given the limited use of the building anticipated, installation of mechanical ventilation is not recommended. If additional use is desired in the future, mechanical ventilation may be necessary, particularly if a cooking space in the kitchen is re-established. If a ventilation system is installed, it should be installed in a manner which minimizes impact to the historic appearance, character, and materials of the building.
- If a security alarm system is desired, it should be installed in a manner which minimizes impact to the historic appearance, materials, and character of the building.
- If rehabilitation activities are planned which impact asbestos containing materials, follow recommendations and requirements for abatement as well as applicable OSHA and EPA guidelines.
- Handle materials containing lead-based paint according to EPA and OSHA regulations during rehabilitation activities.
- Review all code requirements when full building rehabilitation is planned.

5.2 PHASING PLAN & ESTIMATE OF PROBABLE COST OF CONSTRUCTION

The phasing plan organizes the work identified in the prioritized plan into discreet funding phases. The funding phases can be coordinated with a State Historical Fund grant application and the Owner's own fund-raising efforts. The proposed phasing plan addresses the structure's preservation needs for the next ten to fifteen years.

The primary goal for the phasing plan is to complete the physical repair and rehabilitation needs of the structure to ensure its long-term preservation as a historic resource. A grant can be an integral part to implementation of the preservation plan. The Owner can supplement its own funding of the project by applying for a grant from the State Historical Fund. The following describes one possible phasing approach and the projected costs for the project with that approach. Not all items in each phase listed will be eligible for SHF monies.

The estimated project costs presented in this assessment and preservation plan were developed using a parameter methodology, based on very preliminary information, to result in a general order of magnitude of probable cost. The individual line items are based on general assumptions and should not be analyzed on a line by line basis.

When reviewing the following estimate of probable construction cost, it should be understood that the preparer of this information has no control over costs or the price of labor, equipment, or materials, or over the Contractor's method of pricing. The estimates of probable construction costs provided herein are opinions and are made on the basis of the preparer's qualifications and experience. No warranty is expressed or implied as to the accuracy of such opinions as compared to bid or actual costs.

Estimated costs are provided with data for 2023-2024. Escalation to future years is not included due to uncertainty of actual timing of work and the amount of cost escalation which will occur. NOTE: It is critical that costs be finalized and updated by a well-qualified historic preservation contractor. The costs outlined below represent a rough estimate for planning purposes only. Completion of an estimate based on Construction Documents will be necessary for more accurate planning and grant applications.

Phase 01: Construction Documents

Phase one is anticipated to include construction documents for the first phase of rehabilitation of the building. This phase is anticipated to include contractor assistance for limited areas of selective demolition as well as preparation of a cost estimate for subsequent grant phases. Based on the timeline of this report and the anticipated timeline of both SHF grant opportunities and cash match, it is recommended that a grant application be submitted in April of 2023 to fund this phase.

Architectural Services	\$30,000
Structural Engineering	\$15,000
Electrical Engineering	\$6,000
Geotechnical Report	\$5,000
Contractor Assistance & Estimate	\$5,500
 ESTIMATED TOTAL	 \$61,500

Phase 02: Critical Deficiencies

Phase two includes the items identified as Critical Deficiencies in this Historic Structure Assessment. Updated pricing should be provided by a well-qualified contractor upon completion of construction documents associated with this work. Depending on updated costs, funding availability, and project timing, splitting the critical work into multiple phases may be recommended. A phasing strategy should be discussed with the contractor and full project team to determine the most efficient and cost effective phasing plan.

Preservation Activities	\$251,670
General Conditions	\$37,750
Overhead & Profit	\$25,167
Bonding & Permit	\$12,584
Consulting Fees (Construction Administration)	\$18,500
Archaeological Monitoring	\$5,500
Contingency	\$52,700
 ESTIMATED TOTAL	 \$403,871

Phase 03: Serious Deficiencies

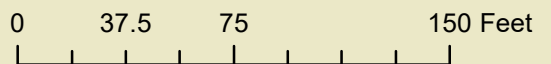
Phase three includes the items identified as Serious Deficiencies in this Historic Structure Assessment. Updated pricing should be provided by a well-qualified contractor upon completion of construction documents associated with this work.

Preservation Activities	\$57,709
General Conditions	\$8,656
Overhead & Profit	\$5,771
Bonding & Permit	\$2,885
Consulting Fees (Construction Administration)	\$10,000
Archaeological Monitoring	\$2,500
Contingency	\$13,100
 ESTIMATED TOTAL	 \$100,621

Phase 04: Minor Deficiencies

Phase three includes the items identified as Minor Deficiencies in this Historic Structure Assessment. Updated pricing should be provided by a well-qualified contractor upon completion of construction documents associated with this work. Depending on funding and project timing, the work in this phase could be combine with a previous phase of the project.

Preservation Activities	\$18,000
General Conditions	\$2,700
Overhead & Profit	\$1,800
Bonding & Permit	\$900
Consulting Fees (Construction Administration)	\$5,500
Archaeological Monitoring	\$1,750
Contingency	\$4,600
 ESTIMATED TOTAL	 \$35,250



IMAGES

NEWS



PROPERTIES



NATURE



HISTORY



EVENTS



IMAGES

The mission of the Boulder County Parks & Open Space Department is to conserve natural, cultural, and agricultural resources and provide public uses that reflect sound resource management and community values.

PHOTOGRAPHS & ILLUSTRATIONS

Cover: Flying Geese, Pascale Fried

Tucker Cabin, Carnegie Branch Library for Local History

Montane Life Zone, Lucas Ainsworth

Mourning Cloak, Jerry A. Payne, USDA

Agricultural Research Service, Bugwood.org

Agricultural Heritage Center, Jim Drew

Nesting Eagles, Howard Witkin

**Uncredited photos from POS Collection*

NATURE DETECTIVES

Cindy Hutchins and Pamela Sherman

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IN CLOSING

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Rachel Gehr and Pascale Fried

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Volume 44, number 4



Tucker Cabin—Road to Restoration

by Carol Beam



Circa 1949 Assessor photo of the Tucker cabin

In June 2022, History Colorado’s State Historical Fund awarded Boulder County Parks & Open Space (BCPOS) a \$13,500 grant to complete an historic structure assessment for the 1871 cabin on the Tucker Open Space, located west of the Town of Nederland.

The assessment is an in-depth physical examination of a historic building’s condition conducted by a licensed architect and a structural engineer. The assessment is comprised of historic background research, an examination of structural components (e.g., foundation, framing, walls, and roofing), as well as the building systems (e.g., mechanical and electrical).

Once completed, the project architect prepares a report that prioritizes the work with cost estimates. Repairs on the Tucker Cabin will be completed over several years, as funding becomes available and the future use of the building is determined. The historic structure assessment project embodies the county’s long-standing vision to preserve the rural character and cultural resources of unincorporated Boulder County by identifying and protecting significant historic properties and protecting them from destruction or harmful alteration.

TUCKER—A SHORT HISTORY

The Tucker cabin is an enduring symbol of the Nederland area’s European-American history. Alfred Tucker was born on Nov. 30, 1820, in Tennessee. Like many others, Tucker was lured to the West, most likely because of the discovery of gold in Colorado. He made his way to Denver City, then part of the Kansas Territory, in May 1859. Tucker’s arrival, along with 17 others from Clinton County, Illinois, on May 28, was noted in the *Rocky Mountain News*.

Although most often identified as a farmer or rancher in public records and newspaper articles, Tucker is also linked to numerous

mining location claims that include the Sampson, Flagg, Ross, Grand Tasora, Plow Boy, Nellie Grey, and Sitting Bull lodes. Tucker was one of the organizers of the Magnolia Consolidated Gold Mining and Concentration Company, incorporated in 1876, as well as one of the founding trustees of the Jefferson Ditch Company, formed for the purpose of irrigating, manufacturing, and mining.

Tucker and his wife, Margaret, amassed substantial agricultural land holdings in Jefferson, Boulder, and Larimer counties during their lifetime. The 324 acres of land surrounding the Tucker cabin is referred to as the “Mountain Ranch.” Evidence suggests that the Mountain Ranch remained a secondary property to the Jefferson County “Home Ranch” where the Tucker family resided.

The Mountain Ranch remained in the Tucker family for 148 years (from 1871-2020), most likely serving as a livestock ranch, a place to harvest peat, and a summer residence for the family.

Upon his death at the Home Ranch in 1880, Alfred Tucker was identified as one of the oldest citizens of Jefferson County. Alfred, and his wife, Margaret, are both buried at Mt. Olivet Cemetery in Wheat Ridge, Colo.

Boulder County purchased the 324-acre Tucker property from the M.A. Tucker Investment Company in 2020, and the Board of County Commissioners landmarked the cabin and outbuildings in 2021 for their historic significance. The cabin is not currently open to the public, and its future use has not been decided.

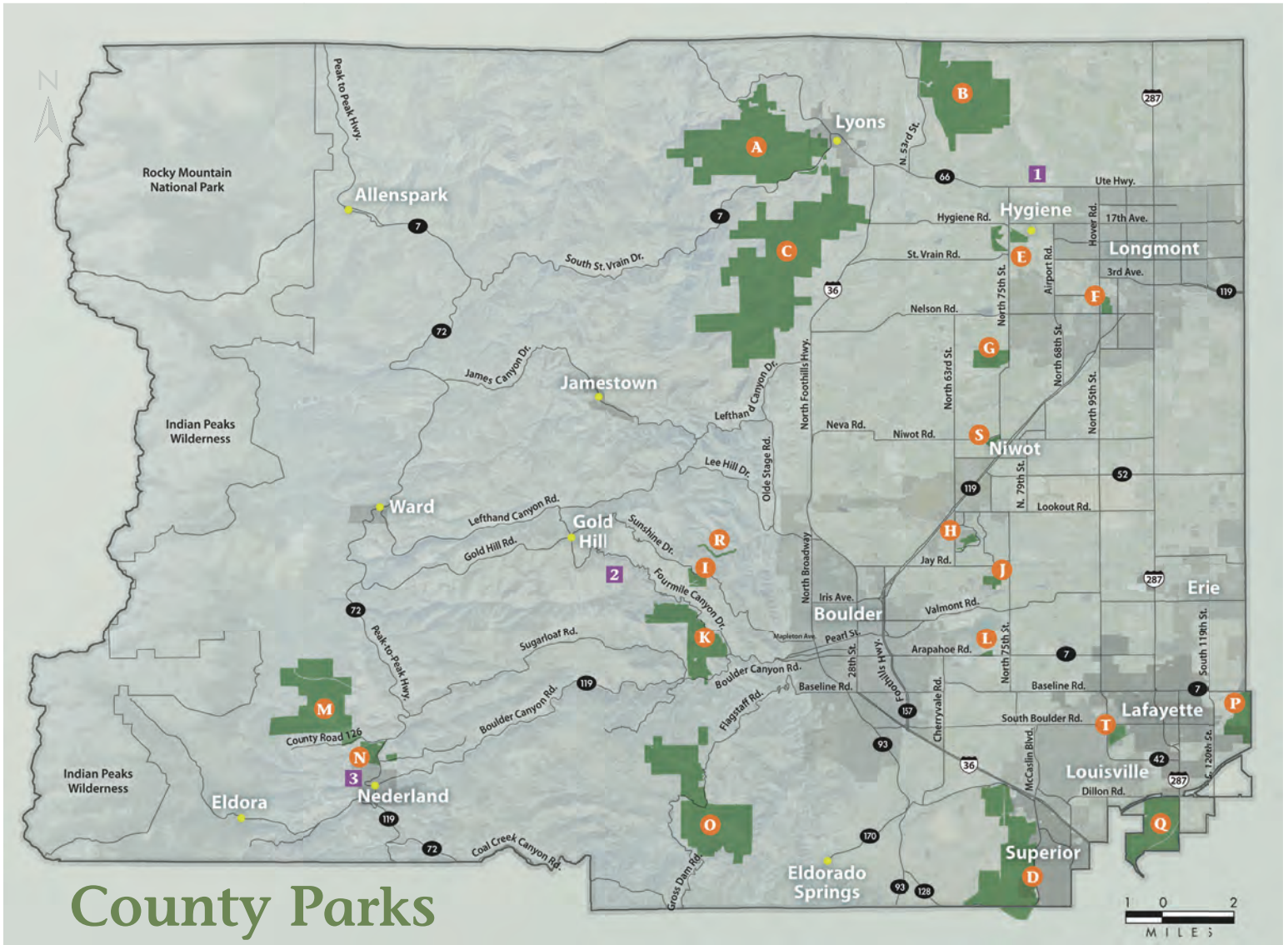
Weaving Tucker’s mining past into an interpretation opportunity, BCPOS is considering making the cabin a stop on the seasonal Hard Rock Mining van tours where participants could view the outside of the cabin and learn more about the very interesting 59’er, Alfred Tucker.



Parks & Open Space

5201 St. Vrain Road, Longmont, CO 80503

www.BoulderCountyOpenSpace.org



- | | | | |
|--|--|---|--|
| A Hall Ranch | F Boulder County Fairgrounds | L Legion Park | R Anne U. White |
| B Ron Stewart Preserve at Rabbit Mountain | G Lagerman Reservoir | M Caribou Ranch | S Dodd Lake |
| C Heil Valley Ranch | H Twin Lakes | N Mud Lake | T Harney Lastoka |
| D Coalton Trailhead | I Bald Mountain Scenic Area | O Walker Ranch | 1 Agricultural Heritage Center |
| E Pella Crossing | J Walden Ponds Wildlife Habitat | P Flagg Park | 2 James F. Bailey Assay Office Museum |
| | K Betasso Preserve | Q Carolyn Holmberg Preserve at Rock Creek Farm | 3 Nederland Mining Museum |

**JANICE MARCHMAN
SENATE DISTRICT 15**

State Senator
200 E. Colfax Avenue
Denver, Colorado 80203
Capitol: (303) 866-4878



COMMITTEES
Vice-Chair Senate Education
Senate Agriculture and Natural Resources

Ms. Gantz and Grant Committee Members,

I write to you today in strong support of Boulder County Parks and Open Space's grant application concerning the Tucker cabin construction documents project. As the State Senator representing Nederland and Senate District 15, I am fully committed to ensuring the preservation and enrichment of our community's historical heritage, and I firmly believe that this project aligns perfectly with that mission.

Boulder County Parks and Open Space has a remarkable record of accomplishment in the arena of historic preservation. Their efforts to maintain and showcase our local history have been evident in several successful initiatives such as the rehabilitation of the Cardinal Mill. This project serves as an educational platform for both residents and visitors interested in learning about our mining history. The Tucker cabin has the potential to offer similar contributions as part of the Hard Rock Mining Tour originating from the Nederland Mining Museum.

Preservation is not merely about saving old structures; it's about maintaining the integrity of these historical sites so they can continue to serve educational and cultural purposes for future generations. This not only ensures the long-term sustainability of the cabin but also safeguards its historical essence. I have every confidence that Boulder County Parks and Open Space will employ the same level of rigor and expertise in the Tucker Cabin Project as they have in past endeavors. This is an organization that is deeply rooted in the community and has been involved in preservation projects for over four decades. They have both the expertise and passion to guarantee that this venture will be executed proficiently.

As someone who has witnessed firsthand the impact that well-preserved historical sites can have on community spirit and education, I strongly urge you to recommend full funding for this essential project. This is an incredible opportunity to contribute positively to the narrative of our community, our history, and ultimately, our state.

Thank you for considering this application and for your continued commitment to the preservation of Colorado's history.

Sincerely,
Janice Marchman
State Senator, Senate District 15

September 25, 2023

Marcie Moore Gantz, Director
State Historical Fund
History Colorado Center
1200 Broadway
Denver, CO, 80203

Dear Marcie,

The Nederland Area Historical Society (NAHS) would like to express its support for Boulder County Parks and Open Space's grant application for the Tucker cabin construction documents project.

As the leader in promoting and preserving the area's history, the NAHS has an interest in Boulder County Parks and Open Space's goal to rehabilitate the Tucker cabin and excited that their long term goal is to open it to the public as part of their popular seasonal Hard Rock Mining Tour.

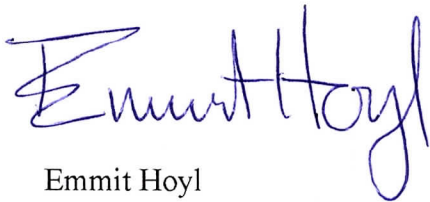
For the NAHS, the Tucker cabin is a wonderful piece of our history. The cabin is named after Alfred Tucker. Like many others at the time, Tucker was lured to the West, most likely because of the discovery of gold in the area, and he made his way to Denver City in May 1859 and eventually the Nederland area by the early 1870s. Tucker is representative of the hard work, ingenuity, and dedication it took to be part of our mountain community in the late 19th century. What is even more interesting is that Tucker's descendants owned the property from 1872 until 2020.

We understand that Boulder County Parks and Open Space recently completed a historic structure assessment on the cabin and now has a better understanding of the cabin's needs and clear guidance how to proceed with the next step by completing the construction documents.

Without Boulder County Parks and Open Space efforts to preserve the cabin, this local landmark will certainly deteriorate to the point of collapsed, and a local landmark will be lost forever. This would be a devastating loss for the Nederland community because historic buildings without major alterations are rare and imperative to preserve for the future. Open Space's efforts to preserve the cabin and educate future visitors about family and areas history should be applauded.

The NAHS would like to encourage the State Historical Fund grant readers to recommend full funding for the project and help preserve one our community's historic landmarks for the future.

Sincerely,



Emmitt Hoyl
Nederland Area Historical Society

History Colorado State Historical Fund Application Signature Page

Applicant Organization

Signature of Legally Authorized Representative
Please sign in blue ink

Name / Title

Date

Property Owner *if different than Applicant Organization*

Signature of Legally Authorized Representative
Please sign in blue ink

Name / Title

Date

Government Official *(see page 26 of the [Program Guidebook](#) for applicability)*

Signature of Legally Authorized Representative
Please sign in blue ink

Name / Title

Date