



Montana State Historic Preservation Office
225 N. Roberts Ave.
P.O. Box 201201
Helena, MT 59620-1201
406-444-7715

April 29, 2023

Dustin Sene, Acting Superintendent
National Park Service
Bighorn Canyon National Recreation Area
20 Highway 14A East
Lovell, WY 82431

Re: Determination of Eligibility/Contributing Status for Lockhart Bridge (24CB2769) in Carbon County, Montana

M. Sene,

Thank you for your letter received April 17, 2024, regarding the determination of eligibility for the Lockhart Bridge (24CB2769). We concur with your determination that 24CB2769 is Eligible for the National Register of Historic Places (NRHP) as a contributing element to the NRHP-listed Lockhart Ranch Historic District (24CB1085).

Please reach out to me with any questions. Thank you for consulting with us.

Respectfully,

Lindsay Tran, Historic Architecture Specialist
406.444.7717
lindsay.tran@mt.gov



United States Department of the Interior

NATIONAL PARK SERVICE
Bighorn Canyon National Recreation Area
20 Highway 14A East
Lovell, WY 82431-9626



IN REPLY REFER TO:
1.A.2

Pete Brown
Montana Historical Society
225 North Roberts
P.O. Box 201201
Helena, MT 59620-1201
406-444-2694

Subject: Initiation of consultation of project on Lockhart Bridge and Retaining Wall, Carbon County (24CB2769).

Dear Mr. Brown,

As part of the National Park Service's responsibilities and in accordance with Section 106 of the National Historic Preservation Act (as amended) as implemented through 36 CFR 800, Bighorn Canyon National Recreation Area (BICA, Bighorn Canyon, the park) would like to initiate consultation with your office on the bridge and associated retaining wall (24CB2769) within the National Register Listed Caroline Lockhart Ranch (24CB1085), though listed as Lockhart Caroline Ranch in the File Search. The file search also shows 24CB0141 as the Caroline Lockhart Ranch. The documentation for that site is a mere one-page document with very little information.

Area of Potential Effect (APE):

Bighorn Canyon has identified an area surrounding the bridge in a 10-meter buffer. This APE also includes the upstream and downstream portion of the Cottonwood Creek drainage, which the bridge traverses, an additional 15-meters, totalling 25-meters from the center of the bridge. The enclosed map shows the APE with surrounding structures.

Project Description:

Due to the extreme amount of rainfall last spring in 2023 and the high amount of ground moisture, the northeast abutment/retaining wall collapsed compromising the stability of

the Lockhart bridge. The compromised section of retaining wall is located on the northeast side of the bridge and consists of dry stack rock measuring 12' in length and 7' in height, 72 square feet in total. Under this dry stack is a retaining footer comprised of 10 cottonwood logs 14' in length and 12" to 16" in diameter which have also deteriorated. This log retaining footer was built using a heavy gauge wire and cedar posts to hold it in place. The deterioration of the log footer is a result of lack of funds and staffing which has further resulted in maintenance delays that were not addressed prior to the collapse of the rock dry stack section.

This rock retaining wall will need to be restored providing support for the northeast side of the bridge using the materials that are present to keep it historically accurate. The cottonwood log footer, 10 logs, will also need restoration to preserve the abutment. Any outside materials used will be in-kind and workmanship will meet the Secretary of Interior Standards for the Treatment of Historic Properties. The work will be completed by BICA's historic preservation crew under the supervision of the Cultural Resource Lead. The Lockhart Bridge and Retaining Walls will be stabilized and reconditioned for the safety and integrity of the visiting public and employees, ADA accessibility will be continued. The project will take this National Register asset from poor to good condition and will meet Bighorn Canyon's goals of compliance and preservation.

Due to the loss of the retaining wall and lack of soil integrity, 2-3 deadman devices will be required to stop sluffing of the embankment and alleviate pressure on the retaining wall itself. This will consist of 8" masonry block and ½" rebar fully grouted, tying into the back of the structure. Cottonwood log footers will then be placed on packed soil with the use of heavy gauge wire and cedar posts. A water-resistant treatment will be applied to the logs and the utilization of a vapor barrier between the logs and the soil will be installed to reduce the speed with which deterioration will occur in the future. A concrete footer, 6" deep by 8" wide and 12' long is placed behind the logs to carry the weight of the retaining wall and allow for masonry foundation. This will provide needed support for the Northeast corner of the bridges steel undercarriage. Using the existing stones, a dry stack veneer will cover all masonry and add the stability required to support the abutment.

Previous Surveys/Reports:

Bighorn Canyon initiated a file search (2024040203) on 3/26/2024 which resulted in findings of 21 sites and 2 reports for within Section 13 of Township 8S and Range 28E. The park also has a 2000 and 2006 Cultural Landscape Inventory that cover the Lockhart Ranch area.

Table 1 - Listing of known sites and structures within or near the APE. Contributing status is taken from the 2000 and 2006 CLI.

Site Number	Description	National Register Status
24CB1085	Lockhart Caroline Ranch	Listed
24CB0141	Caroline Lockhart Ranch	Not listed (Documentation)
24CB2769	Lockhart Bridge and Retaining Walls	Contributing *Non-Contributing

Not yet assigned	Lockhart Main House	Contributing
Not yet assigned	Lockhart Shed (Ruin)	Contributing
Not yet assigned	Lockhart Spring House	Contributing
Not yet assigned	Lockhart Office and Storage Building	Contributing
Not yet assigned	Lockhart Tack Shed	Contributing
Not yet assigned	Lockhart Wood/Coal Storage	Contributing

*2000 CLI shows this structure as Non-Contributing due to 1950s era modifications, while the 2006 CLI shows it as contributing

Determination of Effect:

Bighorn Canyon has made a determination of No Adverse Effect for this project and seeks your office's concurrence.

Please reach out to Richard Olsen, Archeologist/Cultural Resource Program Lead, at richard_olsen@nps.gov, or 307-548-5409 with any questions you might have on this project. Thank you for your time in this important matter.

Sincerely,

Dustin Sene
Acting Superintendent
Bighorn Canyon National Recreation Area

Enclosures:

Figures 1-3

APE map of project area

2000 Lockhart Ranch CLI (provided via electronic system only)

2006 Lockhart Ranch CLI (provided via electronic system only)



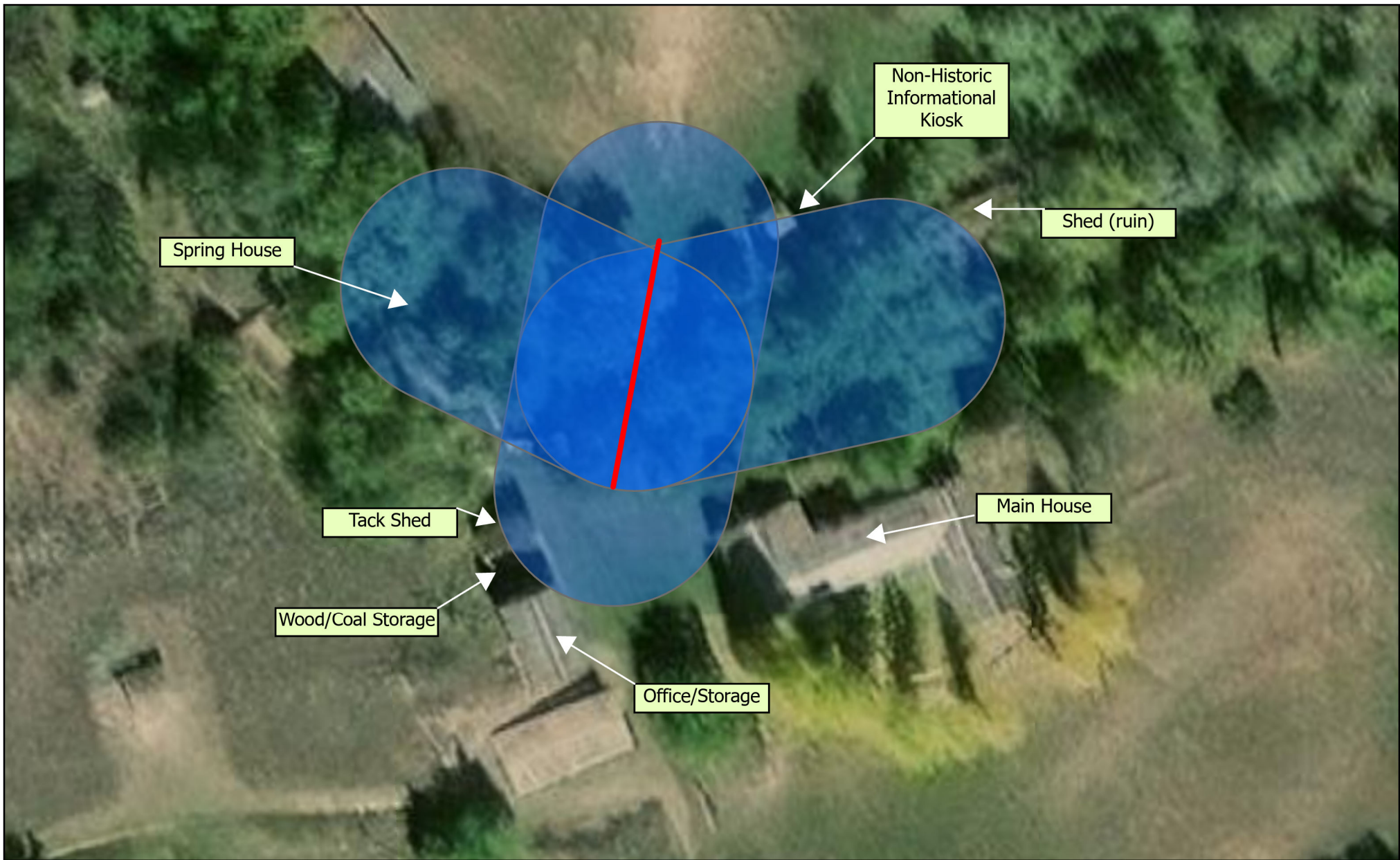
Figure 1 - North side of bridge showing failing logs and wash out behind the logs that is compromising bridge stability.



Figure 2 - Dry stack starting to fail on west side of bridge. Locations will be restacked before damage gets worse.



Figure 3 - East side of bridge where the dry stack and logs have almost completely failed.



Lockhart Bridge (24CB2769)

Lockhart Bridge and Retaining Wall project with APE

National Park Service
Bighorn Canyon NRA Resources Division
March 2024
Data Source: NPS Park Data, ESRI Basedata

 Lockhart Bridge
 Lockhart Bridge APE





United States Department of the Interior

NATIONAL PARK SERVICE
Bighorn Canyon National Recreation Area
20 Highway 14A East
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IN REPLY REFER TO:
1.A.2

Pete Brown
Montana Historical Society
225 North Roberts
P.O. Box 201201
Helena, MT 59620-1201

Subject: Determination of Eligibility/Contributing Status for the Lockhart Bridge (24CB2769).

Dear Mr. Brown,

Bighorn Canyon National Recreation Area (BICA, the park) is providing this letter for a Determination of Eligibility/Contributing Status on the Lockhart Bridge (24CB2769). Though listed as Lockhart Caroline Ranch (24CB1085), the Caroline Lockhart Ranch is a National Register Listed property, of which the bridge is part of. This letter, and the submitted AER Form, should serve as justification for this element of the landscape being determined as contributing. The ranch was determined eligible under Criterion B for its association with author Caroline Lockhart and under Criterion C for it representing the characteristics of ranch structures related to its period.

The bridge was part of the original road that connected the Dryhead Area north of Lockhart Ranch and areas south around historic Kane, WY and the present-day Lovell, WY. Though the road, in a portion of the ranch, still exists today, the road was rerouted to its present location when Caroline Lockhart bought the ranch and grew tired of the road traffic going straight through her property's housing area. The bridge was still in use by Caroline, and her ranch staff, during her tenure at the ranch as it was the only way across Cottonwood Creek in that immediate area. The bridge bisects the ranch with approximately two-thirds of the ranch structures on the south side and a third on the north.

The bridge was originally made of wood timbers, dry stacked stone, and planking. The stone and rails of the bridge were acquired locally, and the deck planks were shipped in. As it aged and the wood began to deteriorate, and modifications were made. The most significant change was the replacement of the underside of the bridge with a metal railroad frame in the 1950s while under the ownership of the Tippetts family. The

modification did not dramatically change the functionality of the bridge and it visually would have looked the same to those that originally used it. The NPS eventually moved the side rails that were on the edge of the bridge closer to the center to limit traffic across it to pedestrians only. During the late-90s the bridge rails were once again moved, but this time back to their original location on the edge of the bridge. Since that change the function of the bridge is the same as it would have been during the ranch's period of significance since the NPS still uses it for pedestrian access and light vehicle traffic. Wood planking has also been replaced, as necessary, to keep the bridge functional. The planks have been replaced with original sized rough-cut lumber.

The bridge is supported by the dirt bank on either side, but the dirt is protected from the creek by dry-stacked stone and a timber log base. Over time the stacked stone has failed, mainly at the top, and has had minor repairs that have been done to it to keep it in a working, stabilized condition. As the dry stack has failed the back of the affected stones have been mortared in place, though this is not visible from anywhere along the bridge or banks. The timber base and support logs have also begun to fail and will need replaced as part of a project already submitted to your office. Recent damage from a 2023 flash flood has washed away portions of the dirt and has further damaged the wooden portion of the base. The project recently submitted to your office is meant to return this structure to as original of a state as possible.

This structure should be considered a contributing element to the ranch because it meets 6 of the 7 aspects of integrity, with materials being the lone exception because of the modification of the undercarriage and backing of the stone abutments being mortared in place. Though the timeframe that the bridge frame modification took place may also be historic, it is not the period for which the ranch itself has been listed.

The AER form has already been submitted to your office under which a Smithsonian number was granted. The form is again attached to this document, without pictures. If there are questions related to this determination, please reach out to the park Archeologist/Cultural Resources Program Lead, Richard Olsen, at richard_olsen@nps.gov or 307-548-5409.

Sincerely,

Dustin Sene
Superintendent
Bighorn Canyon National Recreation Area

Enclosures:

AER Form

New Forms and Instructions

As of July 2022, this AE-R (Architecture and Engineering Record) form replaces Montana SHPO's HPR (Historic Property Record) form for recording historic structures in Montana. Visit <https://mhs.mt.gov/shpo/forms> to download the most recent versions of SHPO forms and instructions. If you are uncertain about which form to use, please contact [Montana SHPO Cultural Records staff](#) at (406) 444-4724, <https://directory.mt.gov/govt/state-dir/agency/historic#shpo>.

REMINDERS

The Principal Investigator is responsible for ensuring that the information in this form is complete and accurate as per the Montana SHPO's data standards. Please consult the [Montana SHPO Consultation Guide, 2023](#) for standards for recording cultural and architectural resources in Montana.

1. Identification

HISTORIC / PROPERTY NAME			SMITHSONIAN NUMBER (issued by SHPO)^	
Lockhart Ranch Bridge			24CB2769	
PROJECT NAME		PROJECT NUMBER		
Restore Lockhart Bridge and Retaining Wall		337460		
DATE	FIRST RECORDED BY	PHONE (000) 000-0000	EMAIL	ADDRESS
11/21/23	Theodore Preator	307-548-5422	Ted_preator@nps.gov	20 HWY 14A East Lovell, WY 82431
DATE	UPDATED BY	PHONE (000) 000-0000	EMAIL	ADDRESS

2. Location

COUNTY	LOT/BLOCK	SUBDIVISION	STREET ADDRESS	CITY / TOWN (NEAREST)							
Carbon			246 Deadman Cr. Rd	Lovell, WY 82431							
UTM COORDINATES OR LAT-LONG FOR THE CENTER OF THE SITE, TO THE 6 TH DECIMAL				DATUM (E.g., NAD27, WGS84, etc.)							
Zone 12/Easting 716968/Northing 5001996				NAD 83							
TOWNSHIP	N/S	RANGE	E/W	SEC	QTR	TOWNSHIP	N/S	RANGE	E/W	SEC	QTR

8	S	28	E	13							

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NARRATIVE / NOTES ON ACCESS (OPTIONAL)

The Caroline Lockhart Ranch bridge is located in south central Montana, Carbon County, and was originally part of the historic Dry Head County road. It is 40 miles north of Lovell, WY and 70 miles south of Hardin, MT on HWY 37 within the Bighorn Canyon NRA.

3. Ownership and Use

CURRENT ADMINISTRATIVE/SURFACE OWNERSHIP	CURRENT USE	
National Park Service/Bighorn Canyon National Recreation Area	Visitor Historic Attraction/Vacant	☒ Public ☐ Private
ORIGINAL ADMINISTRATIVE/SURFACE OWNERSHIP	ORIGINAL/HISTORIC USE	
Caroline Lockhart	Agriculture/Subsistence Domestic Historic subfunctions Animal Facility/Single Dwelling	☐ Public ☒ Private

4. Historic Property/Architecture Description

PROPERTY TYPE*	ARCHITECTURAL STYLE		TIME PERIOD	
Bridge	Vernacular architecture common to Western cattle ranching		1925-1950's	
ARCHITECT NAME/FIRM	ARCHITECT CITY, STATE	BUILDER NAME/COMPANY	BUILDER CITY, STATE	CONSTRUCTION DATE
Caroline Lockhart	Carbon County, MT			1935
STATUS	NOTES ON STATUS CHANGE			
☐ Original location	Lockhart Ranch			
☐ Addition/alteration	Tippetts/NPS			
☐ Moved/relocated				
☐ Destroyed				
☐ Other				

NARRATIVE DESCRIPTION OF PROPERTY

The Lockhart bridge spans Cottonwood Creek, a drainage of Davis Creek, when Caroline Lockhart resided at the ranch. It was supported with large wooden beams made of Pine that extended 20 feet across the drainage. During the 1950s, the bridge (HS# 459) was rebuilt by the Tippetts, a cattle ranching family in the Dry Head, and was fabricated of steel materials salvaged from a dismantled railroad overpass that once spanned the Shoshone River (near Kane, WY), juniper post supports, dry stack masonry, and rough-cut full dimensional 3" x 12"x 20' planks. In 1983, the NPS added a four-foot-wide wood plank decking with full dimensional wood handrails which "pedestrianized" the bridge. Wood bollards were also placed at either end of the bridge to prevent vehicular traffic from passing across the bridge. In 1996, the bridge structure was stabilized and reconstructed to more closely resemble the 1950s era bridge structure.

HISTORY OF PROPERTY

The Lockhart Bridge was constructed in 1935, designer Caroline Lockhart. 1950's Tippetts fabricated the steel undercarriage component of the bridge. It was stabilized in 1983 by the National Park Service and restored/alterd to pedestrian only use in 1997 by NPS. The bridge was documented/entered into the National Registry on 11/03/1989 with significance under Criteria B (Caroline Lockhart, author) and C for vernacular architecture common to western cattle ranching in Bighorn Canyon. The Structure number is HS-459 located in Carbon County, MT within the boundary of Bighorn Canyon NRA

5. National Register Evaluation and Assessment

HAS A FORMAL ELIGIBILITY DETERMINATION BEEN PREVIOUSLY ISSUED FOR THIS SITE/PROPERTY?

☐ No formal determination ☐ Yes, determined NOT eligible ☐ Yes, determined eligible ☐ Yes, NR listed ☐ Unknown

PROVIDE YOUR ASSESSMENT OF THE SITE'S/PROPERTY'S ELIGIBILITY FOR THE NATIONAL REGISTER

- ☐ Meets criteria as an individual property
- ☒ Meets criteria as a contributing element to a historic district
- ☐ Does not meet criteria
- ☐ Does not meet criteria, and is a non-contributing element to a historic district

Historic District Name: Lockhart Ranch Historic District (Smithsonian Number 24CB1085)

APPLICABLE NR CRITERIA⁺

ARGUMENT FOR OR AGAINST EACH NR CRITERION

A – Events	☐ YES ☐ NO	
B – Persons	☒ YES ☐ NO	Caroline Lockhart
C – Characteristics	☒ YES ☐ NO	Distinctive construction – Vernacular architecture common to Western cattle ranching
D – Information	☐ YES ☐ NO	

COMMENTS

Builder – Caroline Lockhart – Circa 1935/contributing resource

INTEGRITY (LOCATION, DESIGN, SETTING, MATERIALS, WORKMANSHIP, FEELING, ASSOCIATION)

(Location) The historic bridge is in south central Montana known as the Dry Head, on the Lockhart Ranch within Bighorn Canyon NRA. The original Dry Head County Road utilized the route where the bridge sits approximately 40 miles north of Lovell, WY.

(Design) The bridge was originally constructed out of large pine beams and rough-cut full dimensional planking but later in the 1950's Tippetts, a cattle ranching family in the Dry Head, fabricated a steel frame undercarriage using materials salvaged from a dismantled railroad overpass stamped with the Illinois Steel Company's logo.

(Setting) The Lockhart Bridge (HS-459) is one of eighteen structures/features within the Lockhart Ranch National Historic Site. The bridge crosses a scenic wooded drainage holding the spring that provides water for the main ranch structures which are divided on each side, making it an integral component in the spatial relationship of the ranch.

(Materials) It is supported by both cottonwood/juniper posts and retaining walls (dry stack stone), with a decking of rough sawn 3" x 12"x 20' planks that cover the steel undercarriage frame. Dry stacked stone walls were erected on both sides of the bridge in its construction in order to stop the deterioration of soil banks that support the bridge span.

(Workmanship) The stones and logs were collected/quarried around the Dry Head by the ranch hands and hired cowboys. The original 1950's Illinois steel undercarriage is retained with restoration of in-kind full dimensional rough-cut planking. The south side and northwest side retaining walls have been preserved with the original dry stack stones and in-kind logs which closely mimics the workmanship of the time period.

(Feeling) The bridge is a representation of the lifeways of western ranchers from the late 19th to middle 20th century. The resources, both built and natural, contribute to a comprehensive understanding of land use, ranch functions, and building methods of vernacular ranching structures. The Lockhart Ranch continues to embody a high level of historic integrity and extant resources from the historic period of significance.

(Association) The Lockhart Bridge is on the List of Classified Structures along with the surrounding structures tied to author and cattlegirl rancher Caroline Lockhart. It embodies the type of architecture found in late 19th century; early 20th century western construction associated with the Homestead Act.

POSSIBLE IMPACTS TO THE SITE

If the bridge were to collapse the bridge would have to be rebuilt. The park cost estimate, estimated by the Maintenance Preservationist and documented in CESS, for complete replacement is \$323,058.00. This covers the cost for replacing the abutments, retaining walls, and all bridge components (timbers, ironwork, railings, steel undercarriage, etc.) and all dirt work and labor. Without the historic bridge social paths are created that cross and detrimentally impact archaeological sites causing irreparable and permanent damage that cannot be repaired nor can a monetary value be identified for their loss. Once the damage is done, it cannot be restored.

6. Information Sources

LIST CITATIONS FOR INFORMATION SOURCES USED TO COMPLETE THIS FORM.

Bearss, Edwin. Historic Resource Study, Bighorn Canyon National Recreation Area, National Park Service, 1970.

Culpin, Mary S. Historic Structures Report, Caroline Lockhart Ranch, Bighorn Canyon National Recreation Area, National Park Service. Draft.

List of Classified Structures (LCS). Bighorn Canyon National Recreation Area Historic Resource Notebook, Volume 3 Of 3 Lockhart Ranch 2006.

Preator, Theodore, PMIS Project 337460. RCM-Restore Lockhart Bridge Retaining Wall, Bighorn National Recreation Area 2023.

7. List of Photos and Maps

IMPORTANT: DO NOT insert images for photos, maps, and other figures to this document. Supporting photographs, maps, and other figures referenced in the table below need to be formatted, saved, and submitted according to SHPO's *Guidelines and Samples for CSR/AER Form Attachments*. For more detailed mapping and photography standards, please review *Montana SHPO Consultation Guide, 2023*.

FIGURE NUMBER	DESCRIPTION / CAPTION	PHOTOGRAPHER	PHOTO DATE
1	Dead Indian Hill, MT Geological Survey Topography Map	USGS	1963
2	Layout of LH Ranch/ drawing		
3	Lockhart Bridge North Side	Theodore Preator	2024
4	Lockhart Bridge South Side	Theodore Preator	2024
5	Lockhart Bridge	Theodore Preator	2024
6	Lockhart Bridge Undercarriage	Theodore Preator	2024

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[^] See **Checklist 2: Submitting Site Records and Requesting Smithsonian Numbers** (Appendix D.2) and **Documenting Sites** (section 2.3) of the Montana SHPO Consultation Guide, 2023.

Online: <https://mhs.mt.gov/Shpo/Archaeology/ConsultingWith>

^{*} See **Site/Property Types, Time Periods, and Diagnostic Types for Cultural and Architectural-Engineering Records**.

Online: https://mhs.mt.gov/Shpo/docs/CSR_AER_Codes.pdf

⁺ See **How to Apply National Register Criteria for Evaluation**. National Park Service, National Register Bulletin. 1997.

Online: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf