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January 23, 2013

Kevin L. McLaury
Division Administrator
Federal Highway Administration
585 Shepard Way, Suite 2
Helena, MT 59601-9785

Attention: Jeff Patten

Subject: Categorical Exclusion
BIG HOLE RIVER-3 M W OF DIVIDE
BH 9047(25)
Control Number: 6292000

This is to request approval of this proposed project as a Categorical Exclusion (CE) under the provisions of 23 CFR 771.117(d), and the Programmatic Agreement as signed by the Montana Department of Transportation (MDT) and the FHWA on April 12, 2001. A copy of the Preliminary Field Review Report (PFRR) dated June 4, 2010 and the meeting memo dated May 16, 2012 are attached. This proposed action also qualifies as a CE under ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

The following form provides the documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion Approval (PCE) as initially agreed by the (former) MONTANA DEPARTMENT OF HIGHWAYS (MDOH) and the FHWA on December 6, 1989. (Note: An "X" in the "N/A" column is "Not Applicable" to, while one in the "UNK" column is "Unknown" at the present time for this proposed project.)

NOTE: A response in a shaded box will require additional documentation for a Categorical Exclusion request in accordance with 23 CFR 771.117(d).

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
1. This proposed project would have (a) significant environmental impact(s) as-defined under 23 CFR 771.117(a).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. This proposed project involves (an) unusual circumstance(s) as described under 23 CFR 771.117(b).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. This proposed project involves one (or more) of the following situations where:				
A. Right-of-Way, easements, and/or construction permits would be required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
1. The context or degree of the Right-of-Way action would have (a) substantial social, economic, or environmental effect(s).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. There is a high rate of residential growth in this proposed project's area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. There is a high rate of commercial growth in this proposed project's area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Work would be on and/or within approximately 1.6 kilometers (1± mile) of an Indian Reservation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. There are parks, recreational, or other properties acquired/improved under <i>Section 6(f)</i> of the <i>1965 National Land & Water Conservation Fund Act</i> (16 USC 460L, <i>et seq.</i>) on or adjacent to proposed the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such <i>Section 6(f)</i> sites would be documented and compensated with the appropriate agencies. (<i>e.g.</i> : MDFWP, local entities, etc.).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Are there any sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under <i>Section 106</i> of the <i>National Historic Preservation Act</i> (16 USC 470, <i>et seq.</i>) by the State Historic Preservation Office (SHPO), which would be affected by this proposed project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under <i>Section 4(f)</i> of the 1966 <i>US DEPARTMENT OF TRANSPORTATION Act</i> (49 USC 303) on or adjacent to the project area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. The proposed project would not impact the site(s), so a 4(f) evaluation is not necessary.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. De minimis finding(s) is/are necessary for this project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. This proposed project requires a full (<i>i.e.</i> : DRAFT & FINAL) <i>Section 4(f)</i> Evaluation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. The activity would involve work in a streambed, wetland, and/or other waterbody(ies) considered as "waters of the United States" or similar (<i>e.g.</i> : "state waters").	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
1. Conditions set forth in <i>Section 10</i> of the <i>Rivers and Harbors Act</i> (33 USC 403) and/or <i>Section 404</i> under <u>33 CFR Parts 320-330</u> of the <i>Clean Water Act</i> (33 USC 1251-1376) would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Impacts in wetlands, including but not limited to those referenced under Executive Order (E.O.) #11990, and their proposed mitigation would be coordinated with the US Army Corps of Engineers and other Resource Agencies (Federal, State and Tribal) as required for permitting	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A 124SPA Stream Protection Authorization would be obtained from the MDFWP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Tribal Water Permit would be required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Work would be required in, across, and/or adjacent to a river which is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system as published by the US Department of Agriculture, or the US Department of the Interior.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The designated National Wild & Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In accordance with <i>Section 7</i> of the <i>Wild and Scenic Rivers Act</i> (16 USC 1271 – 1287), this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or US Bureau of Land Management (Missouri River).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
C. This is a "Type I" action as defined under <u>23 CFR 772.5(h)</u> , which typically consists of highway construction on a new location or the physical alteration of an existing route which substantially changes its horizontal or vertical alignments or increases the number of through-traffic lanes.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. If yes, are there potential noise impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A Noise Analysis would be completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. There would be compliance with the provisions of both <u>23 CFR 772</u> for FHWA's Noise Impact analyses and MDT's Noise Policy.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. There would be substantial changes in access control involved with this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, would they result in extensive economic and/or social impacts on the affected locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities:				
1. Provisions would be made for access by local traffic, and be posted for same.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interference to local events(e.g.: festivals) would be minimized to all possible extent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Substantial controversy associated with this pending action would be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Hazardous wastes /substances, as defined by the US Environmental Protection Agency (EPA) and/or the Montana Department of Environmental Quality (MDEQ), and/or (a) listed "Superfund" (under <u>CERCLA</u> or <u>CECRA</u>) site(s) are currently on and/or adjacent to this proposed project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. The Montana Pollutant Discharge Elimination System's conditions (<u>ARM 16.20.1314</u>), including temporary erosion control features for construction would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
I. Documentation of an "invasive species" review to comply with both EO #13112 and the <i>County Noxious Weed Control Act</i> (7-22-21, MCA), including directions as specified by the county(ies) wherein its intended work would be done.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the proposed work would affect Important Farmlands, then an AD-1006 Farmland Conversion Impact Rating form would be completed in accordance with the <i>Farmland Protection Policy Act</i> (7 USC 4201, <i>et seq.</i>).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
K. Features for the <i>Americans with Disabilities Act</i> (PL 101-336) compliance would be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L. A written Public Involvement Plan, would be completed in accordance with MDT's Public Involvement Handbook.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This proposed project complies with the <i>Clean Air Act's Section 176(c)</i> (42 USC 7521(a), as amended) under the provisions of <u>40 CFR 81.327</u> as it's either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is <u>not</u> covered under the EPA's September 15, 1997 Final Rule on air quality conformity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
and/or				
B. "Nonattainment" area. However, this type of proposed project is either exempted from the conformity determination requirements (under EPA's September 15, 1997 Final Rule), or a conformity determination would be documented in coordination with the responsible agencies: (Metropolitan Planning Organizations, MDEQ's Air Quality Division, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Is this proposed project in a "Class I Air Shed" (Indian Reservations) under <u>40 CFR 52.1382(c)(3)</u> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. There are recorded occurrences, and/or critical habitat in this proposed project's vicinity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Would this proposed project result in a "jeopardy" opinion (under <u>50 CFR 402</u>) from the Fish & Wildlife Service on any Federally listed T/E Species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project would not induce significant land use changes, nor promote unplanned growth. There would be no significant effects on access to adjacent property, nor to present traffic patterns.

This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (EO #12898). It also complies with the provisions of *Title VI* of the *Civil Rights Act* of 1964 (42 USC 2000d) under the FHWA's regulations (23 CFR 200).

In accordance with the provisions of 23 CFR 771.117(a), this pending action would not cause any significant individual, secondary, or cumulative environmental impacts. Therefore, the FHWA's concurrence is requested that this proposed project is properly classified as a Categorical Exclusion.

Barry Brosten, Date: 1/23/13
Barry Brosten - Butte District Project Development Engineer
MDT Environmental Services Bureau

Concur Heidy Bruner, Date: 1/24/13
Heidy Bruner, P.E. - Engineering Section Supervisor
MDT Environmental Services Bureau

Concur Jeffrey A Patten, Date: 1/29/13
Federal Highway Administration

MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Dept. Alternative accessible formats of this information will be provided upon request. For further information, call 406-444-7228 or TTY (800-335-7592), or call Montana Relay at 711.

Attachments: PFRR, memo, map, prog. 4(f), cultural correspondence

Copy (w/o attach.): Jeff Ebert Butte District Administrator
Paul Ferry Highway Engineer
Kent Barnes Bridge Engineer
Tom Martin Chief, Environmental Services Bureau
Robert Stapley Right-of-Way Bureau Chief
Suzy Price Contract Plans Bureau Chief
Nicole Pallister Fiscal Programming Section Supervisor
Tom Erving Fiscal Programming Section
Barry Brosten Environmental Services
Environmental Services File
Montana Legislative Branch Environmental Quality Council (EQC)



Montana Department of Transportation
Helena, Montana 59620-1001

Memorandum

To: Distribution

From: Nathan Haddick, P.E.
Bridge Area Engineer-Butte District

Date: May 16, 2012

Subject: BR 9047(25)
Big Hole River – 3 M W of Divide
UPN 6292000

A meeting was held for the subject project on May 10, 2012 in Helena and Butte via Polycom. The following personnel were in attendance:

Helena

Nathan Haddick	Bridge
Michael Krausert	Bridge
Pat McCann	Geotechnical
Dave Cunningham	Geotechnical
Scott Helm	Geotechnical
Deb Wambach	Environmental
Walt Ludlow	Hydraulics
Jim Davies	Road Design
Mark French	Road Design

Butte District

Dustin Rouse	Preconstruction
Joe Walsh	Preconstruction
Jeff Ebert	District Administrator

History

The possibility was recently explored of permanently removing the existing bridge with this project. After a substantial amount of research by the legal section, it is apparent the state still has responsibility for this segment of road. Pursuing the removal option would require abandonment of the route by the Transportation Commission and acceptance by Butte – Silver Bow and Beaverhead counties. As a result, the decision was made not to pursue the removal option.

Scope of Work

Based on the discussion during the meeting, the following scope of work will be followed for this project:

- The main truss will be rehabilitated. Work on the main truss will include replacement of the deck and any damaged members. New bridge rail will be installed and the truss will be painted. The overhead knee braces may be removed.
- The approach truss will be replaced with a new pre-fabricated pony truss with a concrete deck. This will help maintain the historic integrity of the bridge.
- The abutments and pier will be replaced with new substructure elements of similar geometry to that of the existing elements above the channel bottom. Matching the substructure conditions currently in place will ease the floodplain permitting process and also help preserve the historical aesthetics of the bridge.

Bridge drainage requirements will be assessed and end bent elevations may be adjusted to provide a longitudinal grade to effectively drain the deck. Existing curbing on the main truss may need to be perpetuated to prevent drainage into the river. Some transition road work would be required if the end bent elevations are modified from the current condition. A minimal amount of approach guardrail may be installed.

Schedule

The project will be re-submitted for overrides in OPX2. Functional managers are asked to review your activities and set override values according to the scope of work outlined here. A new Ready Date will be established once overrides are complete.

Distribution:

Jeff Ebert, District Administrator
Paul Ferry, Highways Engineer
Matt Strizich, Materials Engineer
Robert Stapley, Right-of-Way Bureau
Bridge file

Lynn Zanto, Rail, Transit, & Planning Division Administrator
Jake Goettle, Construction Engineering Services Bureau
Tom Martin, Environmental Services Bureau
Roy Peterson, Traffic and Safety Engineer
Jon Swartz, Maintenance Administrator

e-copies

District 2 Functional Managers
Kam Wrigg, Butte Maintenance Chief



Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

To: Kent M. Barnes, PE
Bridge Engineer

From: Bryan Miller, PE
Bridge Area Engineer-Butte District

Date: June 4, 2010

Subject: BR 9047(25)
Big Hole River – 3 M W of Divide
UPN 6292000
Major Bridge Rehabilitation without Added Capacity (231)

Please approve the attached Preliminary Field Review Report.

Approved signed by Kent Barnes Date 6/7/2010
Kent M. Barnes
Bridge Engineer

We are requesting comments from those on the distribution list. We will assume their concurrence if we receive no comments within two weeks of the approval date.

Distribution:

Jeff Ebert, District Administrator	Lynn Zanto, Rail, Transit, & Planning Division Administrator
Paul Ferry, Highways Engineer	Jake Goettle, Construction Engineering Services Bureau
Tom Martin, Environmental Services Bureau Chief	Matt Strizich, Materials Engineer
Duane Williams, Traffic and Safety Engineer	Jon Swartz, Maintenance Administrator (PFR or SOW only)
Robert Stapley, Right-of-Way Bureau Chief	Jeff Patten, FHWA - Operations Engineer

cc:

Dave Jensen, Fiscal Programming Section Supervisor	Dan Dennehy, BSB Public Works
Bryan Miller, Project Design Manager, Butte District	Scott Blossom, FWP
Damian Krings, Road Design Engineer	Bridge file

e-copies:

Jim Walther, Engineering, Preconstruction Engineer	Jason Sorenson, Engineering Cost Analyst
Lesly Tribelhorn, Highways Design Engineer	Jake Goettle, Construction Bureau – VA Engineer
Mark Goodman, Hydraulics Engineer	Joe Olsen, District Preconstruction
Walt Ludlow, District Hydraulics Engineer	Joe Walsh, District Projects Engineer
Bonnie Gundrum, Env. Resources Section Supervisor	Gino Liva, District Materials Lab
Deborah Wambach, District Biologist	Kam Wrigg, District Maintenance Chief
Barry Brosten, District Project Development Engineer	Walt Scott, R/W Utilities Section Supervisor
Danielle Bolan, Traffic Engineer	Amanda Brown, R/W Design
LeRoy Wosoba, District Traffic Project Engineer	Greg Pizzini, Acquisition Manager
Pierre Jomini, Safety Management Engineer	Joe Zody, R/W Access Management Section Manager
Bridge Area Engineer, Butte District	Gary Larson, Project Analysis Bureau Chief
Matt Strizich, Materials Engineer	Sue Sillick, Research Section Supervisor
Jon Watson, Pavement Engineer	Alice Fleisch, ADA Coordinator
Scott Helm, District Geotechnical Manager	Mark Keeffe, Bicycle/Pedestrian Coordinator
Bryce Larsen, Supervisor, Photogrammetry & Survey	Wayne Noem, Secondary Roads Engineer
Marty Beatty, Engineering Information Services	Steve Keller, Maintenance Division Operations Manager (RWIS)
Paul Grant, Public Involvement Officer	Becky Duke, Traffic Data Collection Section Supervisor (WIM)
Jean Riley, Planner	Mike Murphy, Bridge Management Engineer

Preliminary Field Review Report

BR 9047(25)

Project Manager: Bryan Miller

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Introduction

The preliminary field review for the subject project was held May 26, 2010 with the following people in attendance:

Jon Sesso, Dan Dennehy, Dave Cunningham, Tom Loggins, Rick Larson, Jim Jarvis, representing Butte Silver Bow County. Bardell Mangum, Kaitlin Keogh, Kirk Perszyk, Coy Kline, Todd Garrett, Jerry Walker, Scott Blossom, representing Montana Fish, Wildlife and Parks. Dick Talley from DOWL HKM. Bryan Miller, Joe Walsh, Walter Ludlow, Pat McCann, Kam Wrigg, Jim Davies, Barry Brosten, and Deb Wambach representing Montana Department of Transportation.

Proposed Scope of Work

The proposed scope of work is to rehabilitate the existing structure. All structure elements will be evaluated to determine the feasibility and extent of rehabilitation. Portions of the existing bridge may be replaced depending on the structural evaluation. A scour evaluation will be included to determine if scour remediation is required for the existing foundations. Bridge approach rail will be considered to improve safety and to protect the main truss elements from impact. The initial estimate for structural rehabilitation is very high. During the structural evaluation, cost will be refined and different rehabilitation options will be considered to meet the purpose and need. In the end, the do nothing option may be selected based on cost, benefits, funding and expected structure life.

The proposed project has been nominated to replace the existing bridge over the Big Hole river at RP 0.1 on local, off system Route X-47017 (Pump House road). The existing bridge has been classified as Structurally Deficient eligible for replacement due to the deck rating of the main span. The bridge has a minimum vertical clearance of 12.2ft and a load posting of 9 tons. Based on the discussion during the PFR, the proposed scope of work will be structure rehabilitation instead of structure replacement.

Purpose and Need

The purpose and need of the project as determined at the PFR is to maintain the existing access for landowners, recreational traffic and emergency travel across the Big Hole River. The existing access is limited to one lane of traffic with a minimum vertical clearance of 12.2 feet and a load limit of 9 tons. Heavy or oversized loads have an alternative access across the river approximately 1.5 miles downstream.

Project Location and Limits

The project is on route X-47017 (Pump House Road) located about 3 miles west of Divide in T1S, R10W, Section 11. Route X-47017 begins in Beaverhead County and crosses into Silver Bow County at RP 0.73. The project crosses the Big Hole River at RP 0.73. The approximate length of the project is 0.15miles. The actual length and construction limits will be determined after survey and the extent of new bridge approach rail have been determined. The terrain is mountainous and the project is classified as a rural local road (FC=6). See Attached location map.

Work Zone Safety and Mobility

At this time, Level 3 construction zone impacts are anticipated for this project as defined in the Work Zone Safety and Mobility (WZSM) guidance. The plans package will include a Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP). A Traffic Operations (TO) component is not required at this level. A Public Information (PI) component may be included since the bridge will be closed during construction.

Physical Characteristics

The bridge was constructed in 1914 and originally served as the main river crossing for MT-43. In 1968 MT-43 was reconstructed and bypassed what is now Route X-47017. Route X-47017 begins in Beaverhead County off of MT-43 and ends in Silver Bow County on MT-43. Route X-47017 is a paved 24 ft wide road approximately 1.6 miles long.

Preliminary Field Review Report

BR 9047(25)

Project Manager: Bryan Miller

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The horizontal alignment along X-47017 from the beginning of the route to the bridge consist of two sharp curves that do not meet design standards. The bridge is a single lane bridge with blunt ends. There is a private approach on the northwest corner of the bridge and an approach to a fishing access site off the northeast corner of the bridge. The road is short, narrow and has poor horizontal alignment. As a result travel speeds are relatively low. The posted speed is 25mph on the east end and 45 mph on the west.

The existing bridge consist of a through truss main span and a pony truss for an approach span. The Bridge Management System indicates that as built drawings do not exist. The main truss has a concrete deck with an asphalt overlay. The underside of the concrete deck has spalls with exposed reinforcement and is in poor to serious condition. Many of the knee bracing elements have been hit by vehicles and have transferred damage into other elements. A vertical truss member has been hit and has been repaired. The approach truss has a timber deck with an asphalt overlay. The southeast corner of the pony truss has been hit and shows some distortion. The pony truss controls the load capacity of the bridge which is posted at nine tons. The bridge is functionally obsolete due to the low load capacity and the minimum vertical clearance of 12.2 ft. The bridge rail has been hit in numerous places and needs to be replaced. The concrete substructure has some cracks, efflorescence and spalling. There is a scour hole around the intermediate pier.

Year Built	1914
Inventory Number	L47017000+01001
Length	230 ft
Width (curb to curb)	15.7 ft
Number of Spans	2
Bridge Rail Type	steel
Superstructure Type	Thru Truss
Abutment Type	Concrete
Sufficiency Rating	19.9
Structure Status	Structurally Deficient Eligible for Replacement
Posting	Posted at 9 Tons

Traffic Data

Traffic data will be requested.

Accident Analysis

An accident analysis will be requested.

Major Design Features

The PFR Report should provide a general discussion for each of the following design features, if pertinent:

- a. **Design Speed.** The design speed on this project is not applicable. The road is a low volume, low speed road. **Horizontal Alignment.** The horizontal alignment will not change.
- b. **Vertical Alignment.** The vertical alignment will not change.
- c. **Typical Sections and Surfacing.** The existing typical widths will be maintained. If the bridge deck is replaced, a new section of pavement may be required to transition to the new deck.
- d. **Geotechnical Considerations.** Geotechnical considerations may include short sheet pile retaining walls for bridge approach rail or design recommendations for scour remediation.
- e. **Hydraulics.** The USGS will complete an initial scour evaluation using the Rapid Estimation Method. If the bridge is determined to be scour critical, Hydraulics will do a more in depth review and provide a scour remediation recommendation.

Preliminary Field Review Report

BR 9047(25)

Project Manager: Bryan Miller

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- f. **Bridges.** The bridge will be evaluated for rehabilitation. Rehabilitation may include deck replacement, substructure work, scour mitigation, bridge rail replacement, replacement of damaged truss members, removal of knee braces and painting the structure. Replacing the approach span pony truss may be considered to increase the load capacity.
- g. **Traffic.** There are no existing pavement markings. Pavement markings will not be included with this project.
- h. **Pedestrian/Bicycle/ADA.** Existing conditions will be maintained. Implementation of new ADA features will not be considered.
- i. **Miscellaneous Features.** An abandoned pump and line are attached to the east end of the bridge and should be removed as part of the project.
- j. **Context Sensitive Design Issues.** The Context of Pump House Road is a low speed road with primarily low volume traffic. Traffic peaks occur during peak recreational periods.

Other Projects

FWP is developing plans for their Powerhouse fishing access site on the northwest corner of the bridge. The conceptual plan is to improve the ramp, improve the parking area and add a latrine. The FWP contact is Scott Blossom (406) 841-4007.

Location Hydraulics Study Report

The Location Hydraulics Study Report will be prepared by the Hydraulics Section.

Design Exceptions

The completed work will not meet all MDT Bridge Design Standards for Major Rehabilitation of an Off-System Truss.

Criteria	MDT Standard	Provided
Roadway Width	16 feet	15'-8" existing
Vertical Clearance	14 feet	12.2 feet with knee braces
Load Rating	HS 15	<HS 15

In addition, some structural elements may be left at a condition rating less than the required rating of 7. Due to the low traffic, low speed and poor horizontal alignment a minimum amount of guardrail will be provided. Bridge and approach rail will not meet current standards. The rail design will fit the historic context of the site.

Right-of-Way

Construction permits may be required for staging and work around the abutments.

Access Control

Access control is not applicable to this project.

Intelligent Transportation Systems (ITS) Features

ITS solutions will not be considered as part of the design process.

Experimental Features

No experimental features have been identified at this time.

Utilities/Railroads

Overhead power lines cross the Big hole River just upstream of the existing bridge. There is a buried phone line that crosses the river above ground with the power lines. There may be some utility conflicts with installing bridge approach rail. There will be no railroad involvement.

Preliminary Field Review Report

BR 9047(25)

Project Manager: Bryan Miller

Page 4 of 10

Survey

Survey required includes stream cross sections at upstream, centerline and downstream face of bridge, topog survey at the bridge ends for bridge approach section design and details and location of utilities. See attached Survey Request.

Public Involvement

The level of public involvement proposed for this project will be level A. A news release will be published explaining the project and including a department point of contact.

Environmental Considerations

The level of Environmental Documentation proposed is a Categorical Exclusion by Environmental Services. The bridge was determined eligible for the National Register in 1985. The existing paint will need to be tested to determine if lead is present to help develop the rehabilitation strategy for the bridge.

If no instream work is required, it is likely that no CWA 404 permit or SPA 124 Notification will be required. If scour work at the intermediate pier becomes necessary, permitting will be required. Analysis of potential construction impacts to riparian vegetation, wildlife and birds will be required. Construction timing restrictions may be implemented, depending on the expected level of impact. No wetland impacts are expected. Fishing access should remain open during construction, if feasible, and coordinated with MFWP personnel.

Energy Savings/Eco-Friendly Considerations

Rehabilitation of the existing structure is being proposed to minimize the roadway/bridge footprint on the Big Hole River and to utilize the existing structure to the extent practicable.

Traffic Control

The bridge will be closed for construction. An alternate route across the river is approximately 1.3 miles downstream.

A Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP), a limited Transportation Operations (TO) component and a limited Public Information (PI) component is appropriate for this project.

Project Management

The Project Manager is Bryan Miller. Helena Road Design will be responsible for road plans. This project is not under full FHWA oversight.

Preliminary Cost Estimate

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	10,000		
Structure habilitation	500,000		
Traffic Control	10,000		
Subtotal	520000		
Mobilization (18%)	93600		
Subtotal	613600		
Contingencies (15%)	92000		
Total CN	<u>\$705,600</u>	<u>\$159,343</u>	<u>\$1,016,135</u>
CE (10%)	<u>\$70,500</u>	<u>\$15,920</u>	<u>\$101,526</u>
TOTAL CN+CE	<u>\$776,100</u>	<u>\$175,263</u>	<u>\$1,117,661</u>

"NATIONWIDE" PROGRAMMATIC SECTION 4(f) EVALUATION FOR HISTORIC BRIDGES

Project # BH 9047(25), (P.M.S. C# 6292000)

Date: January 23, 2013

Project Name: BIG HOLE RIVER-3 M W OF DIVIDE Location: (site #24BE1803/24SB0588)

Silver Bow and Beaverhead Counties

This proposed project requires use of a historic bridge structure that is on, or eligible for listing on the NATIONAL REGISTER OF HISTORIC PLACES. A description and location map of this proposed bridge rehabilitation project is attached.

NOTE: Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.

	<u>YES</u>	<u>NO</u>
1. Is the bridge a NATIONAL HISTORIC LANDMARK?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have agreements been reached through the procedures pursuant to <i>Section 106</i> of the <i>National Historic Preservation Act</i> with the following:		
STATE HISTORIC PRESERVATION OFFICE (SHPO)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Any other agency/ies with jurisdiction at this location?	—	—
a) If "YES" will additional approval(s) for this <i>Section 4(f)</i> application be required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) List of agencies with jurisdiction at this location:		
USA - CORPS OF ENGINEERS (<i>Section 404</i> Permit)	<input checked="" type="checkbox"/>	—
USDA - Forest Service	<input type="checkbox"/>	—
USDA - Soil Conservation Service (<i>FPPA</i>)	<input type="checkbox"/>	—
FEMA Regulatory Floodway (Permit)	<input type="checkbox"/>	—
MDFW&P - Parks Division (Fishing Access Site)	<input checked="" type="checkbox"/>	—
MDFW&P - Wildlife Division (wetlands)	<input type="checkbox"/>	—
MDFW&P - Fisheries Division (<i>MSPA</i>)	<input type="checkbox"/>	—
MDSL (navigable rivers under state law)	<input checked="" type="checkbox"/>	—
MDEQ - Air And Waste Management Bureau	—	—
MDEQ - Water Quality Bureau	<input checked="" type="checkbox"/>	—
MDNR&C (irrigation systems)	—	—
Other: _____	—	—

ALTERNATIVES & FINDINGS

EACH of the following **ALTERNATIVES** for this proposed project have been evaluated to avoid the use of the historic bridge:

1. "Do Nothing."
2. Rehabilitate the existing bridge without affecting the historic integrity of the structure in accordance with the provisions of *Section 106* in the *NHPA*.
3. Construct the proposed bridge at a location where the existing historic structure's integrity will not be affected as determined by the provisions of the *NHPA*.

The above **ALTERNATIVES** have been applied in accordance with this PROGRAMMATIC SECTION 4(f) EVALUATION and are supported by **EACH** of the following **FINDINGS**:

	<u>YES</u>	<u>NO</u>
1. The "Do Nothing" ALTERNATIVE has been evaluated and has been found to ignore the basic transportation need at this location.	<u>X</u>	<input type="checkbox"/>
This ALTERNATIVE is neither feasible nor prudent for the following reasons:		
a) Maintenance — this ALTERNATIVE does not correct the structurally deficient condition and/or poor geometrics (clearances, approaches, visibility restrictions) found at the existing bridge. Any of these factors can lead to a sudden catastrophic collapse, and/or a potential injury including loss of life. Normal maintenance will not change this situation.	<u>X</u>	<input type="checkbox"/>
b) Safety — this ALTERNATIVE also does not correct the situation which causes the existing bridge to be considered deficient. Because of these deficiencies, the existing bridge presents serious and unacceptable safety hazards to the travelling public and/or places intolerable restrictions (gross vehicle weight, height, and/or width) on transport.	<u>X</u>	<input type="checkbox"/>
A copy of the MDT Bridge Bureau's Inspection Report is attached.	<u>X</u>	<input type="checkbox"/>
2. The rehabilitation ALTERNATIVE has been evaluated with one or more of the following FINDINGS :		
a) The existing bridge's structural deficiency is such that it cannot be rehabilitated to meet minimum acceptable load and traffic requirements without adversely affecting the structure's historic integrity.	—	—X—
b) The existing bridge's geometrics (height, width) cannot be changed without adversely affecting the structure's historic integrity.	—	—X—

ALTERNATIVES & FINDINGS (#2 - conclusion:)

	<u>YES</u>	<u>NO</u>
c) This ALTERNATIVE does not correct the serious restrictions on visibility (approach geometrics, structural requirements) which also contributes to an unsafe condition at this location.	<u>X</u>	_____
Is this rehabilitation ALTERNATIVE therefore considered to be feasible and/or prudent based on the preceding evaluations?	<u>[X]</u>	_____
3. The relocation ALTERNATIVE , in which the new bridge has been moved to a site that presents no adverse effect upon the existing structure has also been considered under the following FINDINGS :		
a) Terrain and/or local geology. The present structure is located at the only feasible and/or prudent site for a bridge on the existing route. Relocating to a new site — either up-, or downstream of the preferred location — will result in extraordinary bridge/approach engineering and associated construction costs.	<u>X</u>	_____
The preferred site is the <u>only</u> prudent location due to the terrain and/or geologic conditions in the general vicinity.	<u>X</u>	_____
Any other location would cause extraordinary disruption to existing traffic patterns.	<u>X</u>	_____
b) Significant social, economic and/or environmental impacts. Locating the proposed bridge in other than the preferred site would result in significant social/economic impacts such as the displacement of families, businesses, or severing of prime/unique farmlands.	<u>X</u>	_____
Significant environmental impacts such as the extraordinary involvement in wetlands, regulated floodplains, or habitat of threatened/endangered species are likely to occur in any location outside the preferred site.	<u>X</u>	_____
c) Engineering and economics. Where difficulty/ies associated with a new location are less extreme than those listed above, the site may still not be feasible and prudent where costs and/or engineering difficulties reach extraordinary magnitudes. Does the ALTERNATE location result in significantly increased engineering or construction costs (such as a longer span, longer approaches, etc.)?	<u>X</u>	_____
d) Preservation of existing historic bridge may not be possible due to either or both of the following:		
the existing structure has deteriorated beyond all reasonable possibility of rehabilitation for a transportation or alternative use;	_____	<u>X</u>
no responsible party can be located to maintain and preserve the historic structure.	_____	<u>X</u>

ALTERNATIVES & FINDINGS (#3. - conclusion:)

	<u>YES</u>	<u>NO</u>
Therefore, in accordance with the previously-listed FINDINGS it is neither feasible nor prudent to locate the proposed bridge at a site other than the preferred ALTERNATE as described.	<u>X</u>	<input type="checkbox"/>

MEASURES TO MINIMIZE HARM

This "Nationwide" Programmatic Section 4(f) Statement applies only when the following **Measures to Minimize Harm** have been assured; a check in a box MAY void the Programmatic application — if so, a full Section 4(f) Evaluation **will be required**:

	<u>YES</u>	<u>NO</u>
1. Is the bridge being rehabilitated under this proposed project? If "YES", is the historic integrity of the structure being preserved to the greatest extent possible; consistent with unavoidable transportation needs, safety, and load requirements?	<u>X</u>	<input type="checkbox"/>
<u>NOTE:</u> If "NO", refer to item 2., following, to determine <u>Programmatic</u> applicability.		
2. The bridge is being replaced, or rehabilitated to the point where historic integrity is affected. Are adequate records being made of the existing structure under HISTORIC AMERICAN ENGINEERING RECORD standards, or other suitable means developed through consultation with SHPO and the ACHP?	<u>X</u>	<input type="checkbox"/>
3. If the bridge is being replaced, is the existing structure being made available for alternative use with a responsible party to maintain and preserve same?	<u>n/a</u>	<input type="checkbox"/>
4. If the bridge is being adversely affected, has agreement been reached through the <u>Section 106</u> process of the <u>National Historic Preservation Act</u> on these Measures to Minimize Harm (which will be incorporated into the proposed project) with the following:		
SHPO (Date: <u>1/14/99</u>)	<u>X</u>	<input type="checkbox"/>
ACHP (Date: <u>1/29/99</u>)	<u>X</u>	<input type="checkbox"/>
FHWA (Date: <u>1/21/99</u>)	<u>X</u>	<input type="checkbox"/>
A copy of the Amendment to Programmatic Agreement signed/approved by these agencies is attached.	<u>X</u>	<input type="checkbox"/>

COORDINATION

There has been additional **COORDINATION** with the following agencies regarding this proposed project (other than those listed previously):

City/County government:
Local historical society:

Adjacent property owners:
Others:

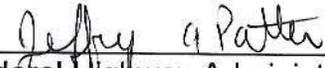
Copies of letters from these agencies regarding this proposed project are attached. This proposed project is also documented as a Categorical Exclusion under the requirements of the *National Environmental Policy Act (42 U.S.C. 4321, et seq.)*.

SUMMARY & APPROVAL - The proposed action meets all criteria regarding the required **ALTERNATIVES, FINDINGS, and Measures to Minimize Harm** which will be incorporated into this proposed project. This proposed project therefore complies with the July 5, 1983 *Programmatic Section 4(f) Evaluation* by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration. This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.



Heidi Bruner, P.E.
Engineering Section Supervisor
Environmental Services

Date: 1/24/13

Approved: 

Federal Highway Administration

Date: 1/29/13

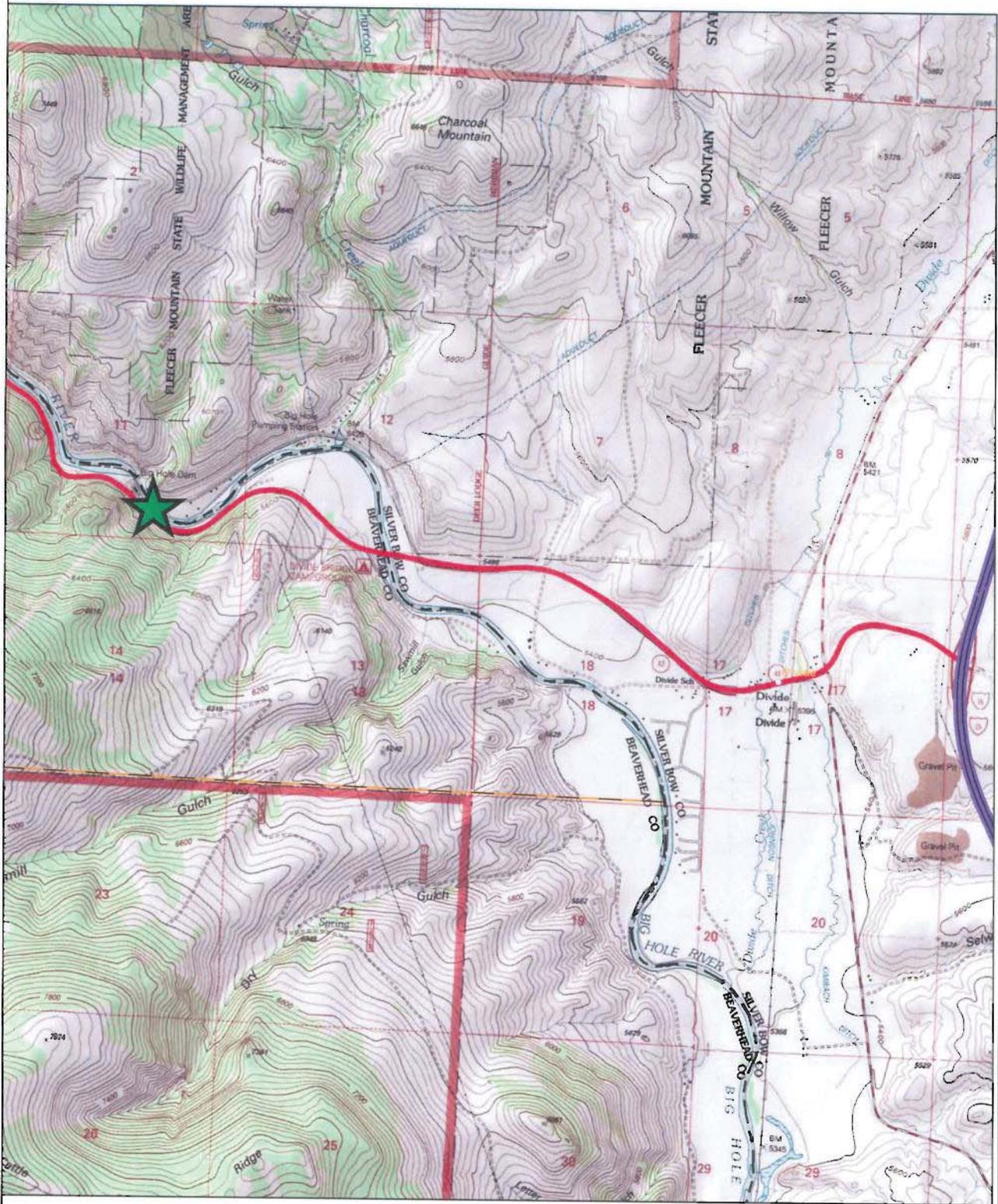
MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406.444.7228 or TTY (800.335.7592) or Montana Relay at 711.

HB:\bcb:s:\projects\butte\6000\6292\6292000en4fbr001.docx

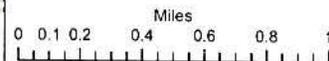
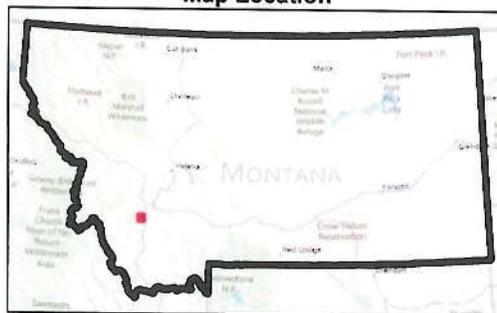
Attachments

copies: Jeff Ebert, P.E. - Butte District Administrator
Paul Ferry, P.E. - Highway Engineer
Kent Barnes, P.E. - Bridge Engineer
Robert Stapley, Right-of-Way Bureau Chief
Nicole Pallister - Fiscal Programming Section
Tom Erving - Fiscal Programming Section
File - Environmental Service

CN 6292000 Big Hole River - 3M W of Divide Pump House Road - Bridge Rehab and Replacement



Map Location



Created 2011





Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

20100922 01

Jim Lynch, Director
Brian Schweitzer, Governor

RECEIVED

OCT - 7 2010

ENVIRONMENTAL

CONCUR
MONTANA SHPO

DATE 5/27/2010 SIGNED

SHPO

- Josef
- M DOT
- Big Hole River - 3 miles west of divide: ELIGIBILITY

September 17, 2010

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Subject: BR 9047(25)
Big Hole River - 3 Miles West of Divide
UPN 6929000

MASTER FILE
COPY

Dear Mark:

Enclosed is the cultural resource report, CRABS and site forms for the above project in Beaverhead and Silver Bow counties. We have determined that the Divide Bridge (24BE1803/24SB0588) is eligible for the National Register of Historic Places for the reasons specified in the report. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline, Historian
Environmental Services

Enclosures

Copies: Jeff Ebert, P.E., Butte District Administrator
Kent Barnes, P.E., Bridge Engineer
Bonnie Gundrum, Resources Section



United States Department of the Interior

NATIONAL PARK SERVICE
INTERMOUNTAIN REGION
12795 West Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287



RECEIVED

FEB 13 2012

ENVIRONMENTAL

IN REPLY REFER TO:

H40 (IMDE-ONR) HAER

February 9, 2012

Jon Axline, Historian
Montana Department of Transportation
P.O. Box 201001
Helena, MT 59620-1001

Subject: BR 9047(25)
Big Hole River - 3 mi. west of Divide
Control No. 6292

Dear Mr. Axline:

We are pleased to inform you that we have reviewed and accepted the Historic American Engineering Record (HAER) documentation for the **Big Hole River Bridge (Divide Bridge)**, spanning the Big Hole River on Power House Road, in the Divide vicinity, Beaverhead and Silver Bow counties, MT. We will transmit the documentation to the Library of Congress for permanent storage.

Thank you for providing these documents. We appreciate your commitment to the recordation of our nation's endangered historic resources.

Sincerely,

Christine Whitacre, Program Manager
Heritage Partnerships Program

cc:
MT SHPO, HABS/HAER contact