



May 17, 2013

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

RECEIVED  
MAY 29 2013  
FHWA  
MONTANA DIVISION

Attention: Gene Kaufman

Subject: Programmatic Categorical Exclusion (PCE) Concurrence Request  
SF 119-GR – W of Conner  
HSIP 473-1(9)3  
CN 7844000

Dear Kevin McLaury:

This submittal requests approval of the above-mentioned proposed project as a Categorical Exclusion under the provisions of 23 CFR 771.117(d) and the Programmatic Agreement as signed by the Montana Department of Transportation (MDT) and the Federal Highway Administration (FHWA) on April 12, 2001. This proposed action also qualifies as a Categorical Exclusion 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 PCE. A copy of the Preliminary Field Review Report is attached. In the following form, "N/A" indicates not applicable; "UNK" indicates unknown.

**NOTE: A response in a large 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 type="checkbox"/>	<input checked="" 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 1965 <i>National Land &amp; 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 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. De minimis finding(s) is/are necessary for this project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 33 CFR Parts 320-330 of the <i>Clean Water Act</i> (33 USC 1251-1376) would be met.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Tribal Water Permit would be required.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 23 CFR 772.5(h), 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 23 CFR 772 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 CERCLA or CECRA) site(s) are currently on and/or adjacent to this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G. The Stormwater Discharge conditions (ARM 17.30.1101-1117), including temporary erosion control features for construction would be met.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

YES    NO    N/A    UNK

- |    |                                                                                                                                                                                                                                                                                                                                                                                                     |                                     |                                     |                                     |                          |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| I. | Documentation of an “invasive species” review to comply with both EO #13112 and the <i>County Noxious Weed Control Act</i> (7-22-2152, 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 a CPA 106 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 40 CFR 81.327 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.<br>and/or                                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| 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 Resources Management Bureau, 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” under 40 CFR 52.1382(c)(2-4) and 40 CFR 81.417? (Northern Cheyenne, Flathead, and Fort Peck Indian Reservations; Glacier and Yellowstone National Parks; Anaconda-Pintlar, Bob Marshall, Cabinet Mountains, Gates of the Mountains, Medicine Lake, Mission Mountain, Red Rock Lakes, Scapegoat, Selway-Bitterroot, and U.L. Bend Wilderness Areas) | <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 type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. Would this proposed project result in a “jeopardy” opinion (under 50 CFR 402) from the Fish & Wildlife Service on any Federally listed T/E Species?

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.

Susan Kilcrease, Date: 5/17/13  
Susan Kilcrease - Missoula District Project Development Engineer  
MDT Environmental Services Bureau

Concur Heidy Bruner, Date: 5/23/13  
Heidy Bruner, P.E. - Engineering Section Supervisor  
MDT Environmental Services Bureau

Concur M. K. Hanjuman, Date: 5/29/13  
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.

Attachment: Preliminary Field Review Report (January 16, 2013)

- |                     |                            |                                       |
|---------------------|----------------------------|---------------------------------------|
| Copy (w/o attach.): | Ed Toavs                   | Missoula District Administrator       |
|                     | Tom S. Martin, P.E.        | Environmental Services Bureau Chief   |
|                     | Roy A. Peterson, P.E.      | Traffic and Safety Engineer           |
|                     | Heidy Bruner, P.E.         | Environmental Services Bureau         |
|                     | Suzy Price                 | Contract Plans Bureau Chief           |
|                     | Lisa Hurley                | Fiscal Programming Section Supervisor |
|                     | Tom Erving                 | Fiscal Programming Section            |
|                     | Robert Stapley             | Right-of-Way Bureau Chief             |
|                     | Susan Kilcrease            | Environmental Services Bureau         |
|                     | File                       | Environmental Services Bureau         |
|                     | Montana Legislative Branch | Environmental Quality Council (EQC)   |



**Memorandum**

To: Roy A. Peterson, PE  
 Traffic and Safety Engineer

From: Gabe B. Priebe, PE [GBP]  
 Traffic Project Engineer

Thru: Ivan B. Ulberg, PE [IBU]  
 Traffic Design Engineer

Date: January 16, 2013

Subject: HSIP 473-1(9)3  
 SF 119-GR W of Conner  
 UPN 7844 000  
 Work Type 310 – Roadway & Roadside Safety Improvements

Please approve the attached Preliminary Field Review Report.

Approved [Signed by RAP] Date [1/16/13]  
 Roy A. Peterson, PE  
 Traffic and Safety 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:**

Ed Toavs, District Administrator	Tom Martin, Environmental Services Bureau Chief
Kent Barnes, Bridge Engineer	Lynn Zanto, Rail, Transit, & Planning Division Administrator
Paul Ferry, Highways Engineer	Jake Goettle, Construction Engineering Services Bureau
Robert Stapley, Right-of-Way Bureau Chief	Matt Strizich, Materials Engineer

**cc:**

Gabe Priebe, Project Design Engineer	Dawn Stratton, Fiscal Programming Section
Traffic and Safety file	Damian Krings, Road Design Engineer
Bitterroot National Forest Supervisor's Office	

**e-copies:**

Jim Walther, Engineering, Preconstruction Engineer	Jake Goettle, Construction Bureau – VA Engineer
Lesly Tribelhorn, Highways Design Engineer	Shane Stack, District Preconstruction
Mark Goodman, Hydraulics Engineer	Ben Nunnallee, District Projects Engineer
KC Yahvah, District Hydraulics Engineer	Darin Reynolds, District Materials Lab
Jon Axline, Acting Env. Resources Section Supervisor	Gary Engman, District Maintenance Chief - Kalispell
Pat Basting, District Biologist	Maureen Walsh, District Right of Way Supervisor
Susan Kilcrease, District Project Development Engineer	Phillip Inman, Utilities Engineering Manager
Danielle Bolan, Traffic Operations Engineer	David Hoerning, R/W Engineering Manager
Ivan Ulberg, Traffic Design Engineer	Greg Pizzini, Acquisition Manager
William Squires, Project Engineer	Joe Zody, R/W Access Management Section Manager
Kraig McLeod, Safety Engineer	Matt Strizich, Materials Engineer
Chris Hardan, Bridge Area Engineer, Missoula District	Daniel Hill, Pavement Analysis Engineer
Mike Grover, Engineering Cost Analyst	Bret Boundy, District Geotechnical Manager
Marty Beatty, Engineering Information Services	Bryce Larsen, Supervisor, Photogrammetry & Survey
Paul Grant, Public Involvement Officer	Paul Johnson, Project Analysis Bureau
Sue Sillick, Research Section Supervisor	Jean Riley, Planner
Alyce Fisher, Fiscal Programming Section	Dawn Stratton, Fiscal Programming Section
Mark Keefe, Bicycle/Pedestrian Coordinator	

## Preliminary Field Review Report

HSIP 473-1(9)3; SF 119-GR W of Conner

Project Manager: Gabe B. Priebe, PE

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### **Introduction**

A Preliminary Field Review was conducted on site, Wednesday, May 16<sup>th</sup>, 2012 with the following personnel in attendance:

Ben Nunnallee, MDT Missoula District – District Projects Engineer  
Bill Squires, MDT Helena – Road Design Missoula Project Design Engineer  
David Holien, MDT Helena – Road Design  
KC Yahvah, MDT Helena – Hydraulics Missoula Hydraulic Engineer  
Ivan Ulberg, MDT Helena – Traffic Project Engineer  
Sandie Stiffler, MDT Helena – Traffic Safety

### **Proposed Scope of Work**

The proposed project has been nominated to provide a roadside safety enhancement by installing guardrail and terminal sections along a section of State Secondary Route 473. Advanced curve warning signing, speed plaques and chevrons will also be replaced or upgraded as necessary.

### **Purpose and Need**

The intent of the project is to address single vehicle run-off-the road crashes. The purpose of this project is to reduce the severity of the crashes by stopping and redirecting vehicles before they leave the roadway.

### **Project Location and Limits**

The project is located in Ravalli County on State Secondary Route 473 approximately 3.5 miles south of the junction of US 93 (N-7). The junction of US 93 and MT 473 is approximately 4 miles southeast of Darby. The functional classification of this highway is rural collector. This section of roadway was built under project number S 268 1 in 1958 with stationing and reference posts running from the north to the south. Guardrail is proposed on the outside of a curve from RP 3.6 to RP 3.8. Terminal sections will be installed for each end of the guardrail. The entire project is located in the Bitterroot National Forest.

### **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 mainly of a Traffic Control Plan (TCP). A limited Transportation Operations (TO) component and a limited Public Information (PI) component may also be included in the plan package. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

### **Physical Characteristics**

This section of S-473 runs through rural, mostly level terrain. According to the MDT Road Log, this section of roadway was constructed in 1958, under project S 268(1), with no subsequent improvements made. Surfacing thickness is reported to be 2.0" of PMS over a 12" base. The highway consists of two 12' lanes with no shoulders.

The project segment contains a horizontal curve with a radius of 1,145.91 feet. The profile grade is +0.58% through the area. There is a moderate cut slope on the right and fill slopes on the left. Fill slopes range from moderate to approximately 2:1 with a drain ditch and swampy area at the bottom of the slope.

### **Traffic Data**

The traffic data for this location is as follows:

2012 (Present) AADT = 1,000  
2014 (Letting) AADT = 1,030  
2034 (Design) AADT = 1,430  
DHV = 170  
Truck% = 3.6%  
Equivalent Single Axle Load = 19  
Annual Growth Rate = 1.7%

## Preliminary Field Review Report

### Crash Analysis

This analysis is for Secondary Route 473 from reference posts 3.4 to 3.8. The Montana Highway Patrol records show thirteen crashes along this section of roadway, for the dates January 1, 2000 through December 31, 2009. The main crash trend is single-vehicle run-off-the-road crashes. Four of the crashes were considered addressable by installing guardrail and chevrons. These crashes resulted in 3 injury crashes (2 incapacitating crashes and 2 non-incapacitating crash) and 1 property damage only crash. The safety improvements in this area yielded a benefit-to-cost ratio of 27.71, assuming a \$64,500 construction cost.

There has been one additional addressable crash from January 1, 2010 through June 30, 2012.

### Major Design Features

- a. **Design Speed.** The design speed for this section of roadway based on its functional classification of rural collector in rolling terrain is 50 miles per hour (mph). The posted speed limit is 55 mph.
- b. **Horizontal Alignment.** The horizontal alignment consists of one horizontal curve to the right.
- c. **Vertical Alignment.** The vertical alignment rises gently through the project. No changes will occur to the vertical alignment.
- d. **Typical Sections and Surfacing.** The existing roadway section will not change.
- e. **Geotechnical Considerations.** No geotechnical involvement is anticipated.
- f. **Hydraulics.** No hydraulic-related involvement is anticipated.
- g. **Bridges.** There are no bridges within project limits.
- h. **Traffic.** Traffic will be the lead for this project. Advanced curve warning signs, speed plaques and chevrons will be replaced or upgraded as necessary. New guardrail and end sections will be installed between RP 3.6 and RP 3.8.
- i. **Pedestrian/Bicycle/ADA.** There are no pedestrian, bicycle or ADA specific features included in this project.
- j. **Context Sensitive Design Issues.** There are no apparent context sensitive design issues.

### Other Projects

No other projects are currently under construction or in design that will affect this project.

### Location Hydraulics Study Report

A Location Hydraulics Study Report is not required for this project.

### Design Exceptions

No design exceptions are anticipated for this project.

### Right-of-Way

No new right-of-way is anticipated for this project.

### Access Control

No changes to access control are proposed.

## Preliminary Field Review Report

HSIP 473-1(9)3; SF 119-GR W of Conner

Project Manager: Gabe B. Priebe, PE

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### Utilities/Railroads

There are no railroads affected by this project. Overhead power transmission lines run near the roadway at various points; however, installing guardrail is not expected to interfere with them. A 'one-call' will be required prior to installing guardrail.

### Intelligent Transportation Systems (ITS) Features

No ITS features will be used on this project.

### Experimental Features

No experimental features will be used on this project.

### Survey

A survey will not be required. The alignment will be drawn from as-built project S-268(1).

### Public Involvement

The project will include a 'Level A' standard of public involvement. This includes a news release explaining the project and a departmental point of contact.

### Environmental Considerations

A 'Categorical Exclusion' is anticipated on this project.

### Traffic Control

The final traffic control plan (TCP) will be discussed at the plan-in-hand with district personnel in attendance. The TCP will include a sequencing special provision that will provide a safe route for the travelling public at all times. All signing and/or flagging operations will be in accordance with the Manual on Uniform Traffic Control Devices.

The guardrail installation can be completed under traffic by closing a portion of the adjacent lane and alternating one-way traffic through the construction area by use of flaggers and/or temporary traffic signals.

### Project Management

Gabe Priebe will be the Project Design Engineer. This project does not require full FHWA oversight.

### Preliminary Cost Estimate

The estimate below is based on information provided by the Safety Engineering office. This estimate will be refined as design progresses.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Guardrail installation	\$42,645		
Traffic Control (10%)	\$4,264		
<b>Subtotal</b>	<b>\$46,909</b>		
Mobilization (25%)	\$11,727		
<b>Subtotal</b>	<b>\$58,636</b>		
Contingencies (10%)	\$5,864		
<b>Total CN</b>	<b><u>\$64,500</u></b>	<b><u>\$10,077</u></b>	<b><u>\$82,840</u></b>
<b>CE (15%)</b>	<b><u>\$9,675</u></b>	<b><u>\$1,511</u></b>	<b><u>\$12,425</u></b>
<b>TOTAL CN+CE</b>	<b><u>\$74,175</u></b>	<b><u>\$11,588</u></b>	<b><u>\$95,265</u></b>

### Ready Date

A ready date will be set once the project is sent for overrides. A letting date will be established before the SOW Report.

# Preliminary Field Review Report

HSIP 473-1(9)3; SF 119-GR W of Conner  
Project Manager: Gabe B. Priebe, PE

## Site Map

The project site map is attached.

