



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

Memorandum

To: Lisa Hurley
Fiscal Programming Section Supervisor

From: Heidi Bruner, P.E.
Engineering Services Supervisor
Environmental Services

Date: February 21, 2014

Subject: Categorical Exclusion (C) Determination
SF 129-SGN Flasher NE Hamilton
HSIP 269-1(44)0
Control Number: 8063000



Environmental Services has reviewed the proposed project and concluded that it will not involve unusual circumstances as described under 23 CFR 771.117(b). As a result, the project qualifies as a Categorical Exclusion under the provisions of 23 CFR 771.117(c), part (8) which describes installation of fencing, sign, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.

The proposed project is to provide upgraded intersection warning signing, advance intersection flashers, upgraded overhead intersection flashers and upgraded curve warning signs and chevrons on the Eastside highway (S-269) near Hamilton at two locations. Upgraded and relocated stop signs and street name signs are also included. The attached Preliminary Field Review Report/Scope of Work Report provides a location map and a more complete project description. This proposed action also qualifies as a Categorical Exclusion under the provisions of ARM 18.2.261 (Sections 75-1-103 and 75-1-201, M.C.A.).

In accordance with the Federal Highway Administration's (FHWA) letter of March 29, 1999, please notify FHWA that the proposed action is being processed in accordance with 23 CFR 771.117(c).

Attachment

copies: Ed Toavs, District Administrator- Missoula
Roy Peterson, P.E., Traffic and Safety Engineer
Gabe Priebe, P.E., Traffic Project Engineer
Robert Stapley, Right-of-Way Bureau Chief
Suzy Price, P.E., Contract Plans Bureau chief
Tom Martin, P.E., Environmental Services Bureau Chief
Susan Kilegease, Missoula Project Development Engineer
Gene Kaufman, P.E., FHWA Operations Engineer
Tom Erving - Fiscal Programming Section
Environmental Services Bureau File

e-copy: Montana Legislative Branch Environmental Quality Council



Memorandum

To: Distribution
From: Roy Peterson, P.E. [RAP]
Traffic & Safety Engineer
Date: October 10, 2013
Subject: HSIP 269-1(44)0
SF 129-SGN FLASHER NE HAMILTON
UPN 8063000
310 – Roadway & Roadside Safety Improvements

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on [10/25/13]. We request that those on the distribution review this report and submit your concurrence within two weeks of the approval date.

Your comments and recommendations are also requested if you do not concur or concur subject to certain conditions. When all personnel on the distribution list have concurred, and the environmental documentation is approved, we will submit this report to the Preconstruction Engineer for approval.

I recommend approval:

Approved _____ Date _____

Distribution:

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

CC:

- Gabe Priebe, Project Design Engineer
Traffic and Safety file
Dawn Stratton, Fiscal Programming Section
Damian Krings, Road Design Engineer

e-copies:

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



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Memorandum

To: Roy Peterson, P.E.
Traffic & Safety Engineer

From: Gabe Priebe, P.E. [GBP]
Traffic Project Engineer

Thru: Ivan Ulberg, P.E. [IBU]
Traffic Design Engineer

Date: October 10, 2013

Subject: HSIP 269-1(44)0
SF 129-SGN FLASHER NE HAMILTON
UPN 8063000
310 – Roadway & Roadside Safety Improvements

Please approve the attached Preliminary Field Review Report/Scope of Work Report.

Approved [Signed by RAP] Date [10/25/13]
Roy Peterson, P.E.
Traffic & Safety Engineer

The same report is also being distributed under a separate cover as a Scope of Work Report for comments and approval recommendations.

cc (w/attach.):
Traffic and Safety Master file

Preliminary Field Review Report

HSIP 269-1(44)0; SF 129-SGN FLASHER NE HAMILTON

Project Manager: Gabe Priebe

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Introduction

A preliminary field review was held on September 9, 2013. The following attended the field review.

Glen Cameron, Traffic Engineer – Missoula
Dwayne Miller, Traffic & Safety – Helena
Gabe Priebe, Traffic & Safety – Helena
Dan Cunningham, Traffic & Safety – Helena
Sandie Stiffler, Traffic & Safety – Helena

Proposed Scope of Work

The proposed project was originally nominated to provide upgraded intersection warning signing, advance intersection flashers, upgraded overhead intersection flashers and upgraded curve warning signs and chevrons on the Eastside highway (S-269) near Hamilton. Upgraded and relocated stop signs and street name signs were also included.

The project was nominated to provide upgrades at three locations as shown on the attached site map. During the PFR, it was noted location 3 has been designed and will be installed as part of the Missoula Curve Signing project (UPN 7493). Also, the District indicated the stop sign relocation at Kurtz lane originally included in this project at location 1 will be completed by Maintenance forces.

Purpose and Need

The purpose of this project is to alert drivers on S-269 of upcoming intersections. The project is needed to enhance intersection safety for the traveling public.

Project Location and Limits

This project is located in Ravalli County at two locations northeast of Hamilton on the Eastside highway (S-269):

- Location 1: RP 0.4 to RP 1.5 – New advance intersection warning signs and flashers on S-269 actuated by traffic on Fairgrounds Road.
- Location 2: RP 5.7 to RP 6.2 – Upgrade the overhead flashers at the intersection of S-269 and Woodside Cutoff, which is a four-way stop in Corvallis. Upgrade stop signs and street name signs.

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). These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

Location 1: RP 0.4 to RP 1.5 – The intersection operates as a three-legged intersection with S-269 comprising the north and south (through) legs and Fairgrounds Road comprising the east leg (stop-control). This portion of S-269 was last improved in 2012 with project MTCE 310347. The pavement width is 30 feet and includes two 12-foot travel lanes and two 3-foot shoulders. The pavement consists of 6.9 inches of plant mix over 7 inches of base course. Fairgrounds Road is an east-west two-lane paved county road which terminates on the east at the intersection with S-269. The terrain for S-269 at this location is rolling in a rural setting with the subject intersection located just north of a crest vertical curve combined with a gentle horizontal curve. Due to the horizontal and vertical curves, intersection sight distance for vehicles turning left onto S-269 is limited to approximately the minimum required for passenger cars at 50 mph. There is minimal intersection skew.

Location 2: RP 5.6 to RP 6.2 – The intersection operates as a four-legged all-way-stop intersection with S-269 comprising the north and south legs and Willow Creek Road and Woodside Cutoff Road comprising the east and west legs respectively. This portion of S-269 was last improved in 2011 with

Preliminary Field Review Report

HSIP 269-1(44)0; SF 129-SGN FLASHER NE HAMILTON

Project Manager: Gabe Priebe

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project STPS 269-1(35)5. The pavement width is 30 feet and includes two 12-foot travel lanes and two 3-foot shoulders. The pavement consists of 5.4 inches of plant mix over 9 inches of base course. The terrain at this location is flat in a semi-urban setting. The horizontal alignments of both S-269 and Woodside Cutoff are tangent at the intersection. There is minimal intersection skew.

Traffic Data

The traffic data for this location is as follows:

S-269:

2013 (Present) AADT = 5,560
2014 (Letting) AADT = 5,760
2034 (Design) AADT = 11,460
DHV = 1,260
Truck % = 2.5%
Equivalent Single Axle Load (ESAL) = 66
Annual Growth Rate = 3.5%

Crash Analysis

Location 1: RP 0.4 to RP 1.5 - The Montana Highway Patrol records indicate a total of 31 crashes occurred along this section of roadway between January 1, 2006 and December 31, 2010. The main observed crash trend is intersection related crashes (22). The second observed crash trend is single vehicle run-off-the-road crashes (8). Of the 31 crashes, 12 were considered addressable through the installation of an Intersection Ahead sign and an ITS Flasher system. The proposed safety improvement in this area yielded a benefit-to cost ratio of 26.52, assuming a \$58,425 project cost. For the time period from January 1, 2011 through December 31, 2012 there have been five additional crashes. Two of these crashes are considered addressable by the proposed improvement.

Location 2: RP 5.7 to RP 6.2 - The Montana Highway Patrol records indicate a total of 21 crashes occurred along this section of roadway between January 1, 2006 and December 31, 2010. The main observed crash trend is intersection related crashes (17). The second observed crash trend is wild animal-vehicle crashes (3). Of the 21 crashes, 6 were considered addressable through the installation of larger stop signs and flasher upgrades. The proposed safety improvement in this area yielded a benefit-to cost ratio of 89.71, assuming a \$13,780 project cost. For the time period from January 1, 2011 through December 31, 2012 there have been six additional crashes. Four of these crashes are considered addressable by the proposed improvement.

This project is eligible for High Risk Rural Roads Program funding.

Major Design Features

- a. **Design Speed.** The design speed on S-269 for a rural collector in rolling terrain is 50 mph. The posted speed limits are as follows:
 - i. Location 1 – S-269 is posted at 50 mph and Fairgrounds Road is posted at 35 mph.
 - ii. Location 2 – All four legs of the intersection are posted at 25 mph.
- b. **Horizontal Alignment.** The horizontal alignment will not change with this project.
- c. **Vertical Alignment.** The vertical alignment will not change with this project.
- d. **Typical Sections and Surfacing.** The current surfacing will not be changed with this project.
- e. **Geotechnical Considerations.** There are no geotechnical considerations for this project.
- f. **Hydraulics.** There are no hydraulic considerations for this project.
- g. **Bridges.** There are no bridges within the project limits.
- h. **Traffic.** The Traffic Section will be responsible for signing and electrical plans.
 - i. Location 1 – Intersection ahead warning signs with flashers actuated by vehicles stopped on Fairgrounds Road.
 - ii. Location 2 – Upgraded overhead flashers installed on the existing span wire, upgraded stop and street name signs.

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- i. **Pedestrian/Bicycle/ADA.** There is no Pedestrian/Bicycle/ADA involvement.
- j. **Miscellaneous Features.** No miscellaneous features have been identified.
- k. **Context Sensitive Design Issues.** There are no context sensitive design issues identified for this project.

Other Projects

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

This project may be tied for construction with a nearby safety project depending upon project schedules.

Location Hydraulics Study Report

A Location Hydraulics Study Report will not be needed for this project.

Design Exceptions

No design exceptions are anticipated for this project.

Right-of-Way

No new right-of-way will be needed for this project.

Access Control

No changes to access control are proposed.

Utilities/Railroads

There are no railroads affected by this project. A one-call will be specified on the plans to ensure that the sign supports and conduit runs are not installed in conflict with any underground utility features.

Cold-In-Place Recycle - N/A

Maintenance Items

No Maintenance involvement is required other than relocating the stop sign at Kurtz Lane.

Intelligent Transportation Systems (ITS) Features

Vehicle-actuated flashers are considered an ITS feature.

Experimental Features

No experimental features will be used on this project.

Survey

No survey is required.

Public Involvement

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

Tribal Involvement

No tribal involvement is required since this project is not within a reservation.

Environmental Considerations

No significant environmental impacts or issues were identified. A Categorical Exclusion is anticipated for this project.

Energy Savings/Eco-Friendly Considerations

No Energy Savings/Eco-Friendly Considerations have been identified at this time.

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Traffic Control

The plans package will include a Transportation Management Plan (TMP) consisting solely of a Traffic Control Plan (TCP). A Transportation Operations (TO) component and a Public Information (PI) component are not necessary for this level of construction zone.

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 during nomination and will be refined as design progresses.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Electrical & Signing	\$43,320		
Mobilization (15%)	\$6,498		
Subtotal	\$49,818		
Contingencies (10%)	\$4,982		
Total CN	<u>\$54,800</u>	<u>\$8,870</u>	<u>\$69,476</u>
CE (15%)	<u>\$8,220</u>	<u>\$1,330</u>	<u>\$10,420</u>
TOTAL CN+CE	<u>\$92,510</u>	<u>\$10,200</u>	<u>\$79,896</u>

Note: Inflation is calculated in PPMS to the letting date. If there is no letting date, the project is assumed to be inside the current TCP and is given a maximum of 5 years until letting. IDC is calculated at 9.12% as of FY 2014.

Ready Date

Ready and letting dates will be established after OPX-2 over-rides have been completed.

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Site Map

