



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

Memorandum

To: Dawn Stratton, Acting Supervisor
 Fiscal Programming Section

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

Date: February 14, 2011

Subject: LT Turn Imp Kalispell Area
 SFCN-SFCS STWD (083)
 Control Number: 7564 000

Environmental Services has determined that this proposed action qualifies as a Categorical Exclusion under the provisions of ARM 18.2.261 (Sections **75-1-103** and **75-1-201, M.C.A.**). This proposed project will not involve extraordinary circumstances as described in ARM 18.2.261(2). The proposed project is to install left turn phases at two existing signalized intersection in Kalispell. The intersection of US 93 and Grandview will receive a south bound left turn phase. The intersection of White Stage and Reserve will receive EB and WB left turn phases. Some new conduit and wiring will be necessary as well as new control equipment. The attached Project Report released on February 10, 2011 provides a more detailed description of the proposed project and a location map.

The project also qualifies as a Categorical Exclusion under the provisions of 23 CFR 771.117(c), part (8). This proposed project will not involve unusual circumstances as described under 23 CFR 771.117(b). 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

- | | | |
|-----|-------------------------------|---------------------------------------|
| cc: | Doug Moeller | District Administrator- Missoula |
| | Paul F. Ferry, P.E. | Highways Engineer |
| | Duane Williams, P.E. | Traffic and Safety Engineer |
| | Randy Boysen, P.E. | Project Design Manager |
| | Robert Stapley | Right-of-Way Bureau Chief |
| | Walt Scott | Utilities Section Supervisor |
| | Suzy Price, P.E. | Contract Plans Supervisor |
| | Tom Martin, P.E. | Environmental Services Bureau Chief |
| | Susan Kilcrease | Missoula Project Development Engineer |
| | Gene Kaufman, P.E. | Operations Engineer-FHWA |
| | Environmental Quality Council | |
| | File | |



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

Memorandum

To: Distribution

From: Duane E. Williams, P.E. DW
Traffic and Safety Engineer

Date: February 10, 2011

Subject: SFCN-SFCS STWD(083)
LT Turn Imp Kalispell Area
UPN 7564000
Work Type 410 – Traffic Signals and Lighting

Attached is the Project Report. We request that those on the distribution review this report and submit your comments within one week. The plan package is also attached. This project will be sent to Contract Plans by the end of February.

This project will utilize FFY 2011 State funded construction dollars and will be included in the May 11, 2011 letting. An environmental document is pending. No right-of-way will be required.

Your comments and recommendations are also requested if you are not on the direct distribution list.

Attachments

Distribution:

Doug Moeller, District Administrator	Lynn Zanto, Rail, Transit, & Planning Division Administrator
Kent Barnes, Bridge 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
Ron Stapley, Right-of-Way Bureau Chief	Paul Ferry, Highways Engineer
Jim Hansz, City of Kalispell Public Works PO Box 1997 Kalispell, MT 59901	

cc:

Dave Jensen, Fiscal Programming Section Supervisor	Traffic and Safety File
Randy Boysen, Project Design Manager	

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	Shane Stack, District Preconstruction
KC Yahvah, District Hydraulics Engineer	Ben Nunnallee, District Projects Engineer
Bonnie Gundrum, Env. Resources Section Supervisor	Paul Grant, Public Involvement Officer
Pat Basting, District Biologist	Kyle DeMars, District Maintenance Chief
Susan Kilcrease, District Project Development Engineer	Walt Scott, R/W Utilities Section Supervisor
Danielle Bolan, Traffic Engineer	Dave Hoerning, R/W Design Manager
Ivan Ulberg, District Traffic Project Engineer	Greg Pizzini, Acquisition Manager
Kraig McLeod, Safety Management Engineer	Joe Zody, R/W Access Management Section Manager
Nigel Mends, Bridge Area Engineer, Missoula District	Paul Johnson, Project Analysis Bureau Chief
Marty Beatty, Engineering Information Services	Sue Sillick, Research Section Supervisor
	Alice Flesch, ADA Coordinator
	Mark Keeffe, Bicycle/Pedestrian Coordinator
	Jean Riley, Planner

Project Report/Final Plan Review

SFCN-SFCS STWD(083) LT Turn Imp Kalispell Area

Project Manager : Ivan B. Ulberg, P.E.

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Introduction

This document will act as both a SOW type document as well as a FPR. The plan package is attached. Please provide any comments by February 25, 2011. This project will be sent to contract plans in March for a May 12, 2011 letting.

A project review was held in January, 2011 with the following people in attendance:

Randy Boysen, P.E.	Project Manager	MDT Helena – Traffic
Ivan B. Ulberg, P.E.	Traffic Projects Engineer	MDT Helena – Traffic
Dan Cunningham	Traffic – Electrical	MDT Helena – Traffic
Phill Balsley, P.E.	Traffic – Electrical	MDT Helena – Traffic
Danielle Bolan, P.E.	Traffic Engineer	MDT Helena – Traffic

Proposed Scope of Work

This project will install left turn phases at two existing signalized intersections in Kalispell. The intersection of US-93 and Grandview will receive a SB left turn phase. The intersection of Whitefish Stage and Reserve will receive EB and WB left turn phases. Some new conduit and wiring will be necessary as well as new control equipment to make the phases operational.

The project will be funded by state funded construction dollars in FY 2011. This project has a ready date of March, 2011. The plans attached to this document are also out for review. This will act as the final plan review for this project as well.

Purpose and Need

Both locations were recommended for left turn phases based on traffic studies done by the Traffic Engineering office last year. The left turn phases are justified for reasons of mitigating some of the congestion issues on mainline approaches and to address the crashes relating to left turning vehicles.

Project Location and Limits

Location #1 is at the intersection of US-93 and Grandview. The intersection is at RP 114.9 on N-5 (US-93).

Location #2 is at the intersection of Whitefish Stage and Reserve. The intersection is at RP 5.0 on S-548 (Reserve Drive).

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. Traffic Control will be handled through the special provisions.

Physical Characteristics

The intersection US-93 and Grandview is currently signalized. It currently has a NB left turn phase. The current control equipment cannot accommodate more phases and will need to be replaced with this project.

The intersection of Whitefish Stage and Reserve is currently signalized. The current control equipment will not accommodate the proposed modifications and will need to be replaced with this project.

Traffic Data

This project includes hardware upgrades only; traffic data will not be requested.

Crash Analysis**US-93 and Grandview**

A crash analysis was conducted at this intersection for the time period June 1, 2007 through June 30, 2010. During this time period, there were 15 total crashes reported at the intersection of US 93 and Grandview/4-mile. None of the recorded crashes would be considered addressable by the addition of a southbound left turn arrow.

During the studied time period, there were:

- 10 rear-end crashes on US 93
- 3 angle crashes
- 1 left turn opposite direction crashes involving northbound left turner colliding with southbound through vehicle.
- One crash where the driver fell asleep, one sideswipe same direction and one crash in which a vehicle pulled up into the bicyclist's path and struck the bicycle.

Whitefish Stage and Reserve

A crash analysis was conducted at the intersection for the dates July 1, 2005 through June 30, 2008. During this time period there were 27 total crashes recorded at this intersection. Of the 27 crashes, 21 (78%) occurred on dry pavement and 22 (82%) occurred during the day. The crash breakdown is included below:

Left Turn Crashes	5	19%
Rear End Crashes	14	51%
Right Angle Crashes	5	19%
Right Turn Crashes	1	4%
Single Vehicle Crashes	2	7%
Total Crashes	27	

Project Report/Final Plan Review

SFCN-SFCS STWD(083) LT Turn Imp Kalispell Area
Project Manager : Ivan B. Ulberg, P.E.

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Left Turn Crashes

Of the five left turn crashes at this location, three are considered correctible by the installation of eastbound and westbound left turn phase on Reserve Dr. These three crashes involved eastbound or westbound vehicles failing to yield and turned left in front of oncoming traffic. One of these three was a direct result of site obstruction caused by a vehicle sitting in the opposite left turn bay and blocking site distance for the left turning vehicle. The other two left turn crashes involved a northbound or southbound vehicle failing to yield and turned left in front of oncoming through traffic.

Major Design Features

- a. **Design Speed.** The project will be located on two locations within the City of Kalispell. Design speed will vary by route.
- b. **Horizontal Alignment.** The existing horizontal alignment will not be changed with this project.
- c. **Vertical Alignment.** The existing vertical alignment will not be changed with this project.
- d. **Typical Sections and Surfacing.** The project will be located on multiple routes throughout the city. Typical section will vary by route.
- e. **Geotechnical Considerations.** No geotechnical involvement will be necessary.
- f. **Hydraulics.** No hydraulics involvement will be necessary.
- g. **Bridges.** The work will not occur on, near or around any bridges.
- h. **Traffic.** The traffic section will provide the necessary plans/special provisions for this project. Randy Boysen (444-7246) will be the lead on this project.
- i. **Pedestrian/Bicycle/ADA.** All pedestrian, bicycle and ADA facilities will remain the same with this project; no work will be completed.
- j. **Miscellaneous Features.** No miscellaneous features identified.
- k. **Context Sensitive Design Issues.** No context sensitive design issues identified.

Other Projects

No related projects in the area have been identified.

Location Hydraulics Study Report

No Location Hydraulics Study Report will be necessary.

Design Exceptions

No Design Exceptions will be necessary.

Right-of-Way

No right-of-way will be necessary as this project is an upgrade of existing hardware only.

Cold-In-Place Recycle (for mill & overlay projects only)

Not Applicable for this project.

Access Control

Access control will not be modified with this project.

Utilities/Railroads

No railroad involvement.

Whitefish Stage and Reserve Dr.

No utility involvement is necessary. There are likely utilities in the area but minimal work is required at the intersection. The contractor completing a One-Call should suffice. It will be the responsibility of the contractor to take whatever means necessary to avoid any and all utilities in the area.

US-93 and Grandview

No utility involvement is necessary. There are likely utilities in the area. The project will involve new conduit crossings which will need to be bored/pushed. It will be the responsibility of the contractor to take whatever means necessary to avoid any and all utilities in the area.

Intelligent Transportation Systems (ITS) Features

The left turn phases will require new control equipment to make them operational.

Survey

No preliminary survey will be completed for this project. Any necessary locates/SUE surveys will be the responsibility of the contractor.

Public Involvement

Level A is appropriate for this project. A news release will be prepared.

Environmental Considerations

A Categorical Exclusion is expected for this project. Further environmental considerations will be provided by the Environmental Section.

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SFCN-SFCS STWD(083) LT Turn Imp Kalispell Area
Project Manager : Ivan B. Ulberg, P.E.

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Energy Savings/Eco-Friendly Considerations

Any new traffic signal indications will include LED displays.

Experimental Features

No experimental features are appropriate for this project.

Traffic Control

Traffic will be maintained through the project construction with appropriate signing, flagging, etc., in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

Project Management

The Electrical Section of the Traffic and Safety Bureau will be responsible for the design of this project. Randy Boysen (444-7246) will be the lead on the project.

Preliminary Cost Estimate (Both Locations)

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC
Electrical	\$99,237		
Traffic Control	\$10,000		
Subtotal	\$109,237		
Mobilization (10%)	\$10,923.70		
Subtotal	\$120,160.70		
Contingencies (8%)	\$9,612.86		
Total CN	\$ 129,773.56	\$	\$ 147,098.33
CE (10%)	\$ 12,977.36	\$	\$ 1,732.48
TOTAL CN+CE	\$ 142,750.91	\$ 0.00	\$ 161,808.16

Inflation was not included as this project will be under contract this summer.

Ready Date

This project will be funded by State Funded Construction in FY 2011. The project has a 'ready date' of March 24, 2011 and is expected in the May 12, 2011 letting.

Site Map

The project site map is included.

