



December 30, 2010

Kevin McLaury
Division Administrator
Federal Highway Administration
585 Shepard Way
Helena MT 59601

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MONTANA DIVISION

**Subject: Programmatic Categorical Exclusion (PCE) Concurrence Request
HSIP 25(72)
SF 099 Sun Canyon/Oro Fino
Control Number: 7202000**

MASTER FILE
COPY

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 MDT and FHWA on April 12, 2001. This proposed action also qualifies as a Categorical Exclusion under ARM 18.2.261 (MCA 75-1-103 and MCA 75-1-201).

The following form provides documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion. A copy of the Preliminary Field Review Report/Scope of Work Report, dated November 16, 2010, and a project location map are 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"/>
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A high rate of residential growth exists in the area of the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A high rate of commercial growth exists in the area of the proposed project.	<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"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
5. Parks, recreational, or other properties acquired/improved under Section 6(f) of the 1965 National Land & Water Conservation Fund Act (16 USC 460L, <i>et seq.</i>) are on or adjacent to the proposed project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such Section 6(f) sites would be documented and compensated with the appropriate agencies (MDFWP, local entities, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under Section 106 of the National Historic Preservation Act (16 USC 470, <i>et seq.</i>) by the State Historic Preservation Office (SHPO) would be affected by this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under Section 4(f) of the 1966 US Department Of Transportation Act (49 USC 303) are 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. A de minimis finding has been secured for this project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Nationwide Programmatic Section 4(f) Evaluation forms for those sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. This proposed project requires a full Section 4(f) 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 water body (ies) considered as "waters of the United States" or similar (e.g., "state waters").	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Conditions set forth in Section 10 of the Rivers and Harbors Act (33 USC 403) and/or Section 404 of the Clean Water Act (33 USC 1251-1376) codified at 33 CFR 320-330 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 (EO) #11990, and 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 would be obtained from the MDFWP.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A delineated floodplain exists 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. A 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 that 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"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
The designated National Wild and/or 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 Section 7 of the Wild and Scenic Rivers Act (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"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Substantial changes in access control would be associated with the 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 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"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
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 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"/>
I. Documentation of an invasive species review to comply with both EO #13112 and the County Noxious Weed Control Act (7-22-2152, MCA), including directions as specified by the county(ies) wherein its intended work would be done would be conducted.	<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. If the proposed work would affect Important Farmlands, then an AD 1006 Farmland Conversion Impact Rating form would be completed in accordance with the Farmland Protection Policy Act (7 USC 4201, <i>et seq.</i>).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Features for the Americans with Disabilities Act (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 Clean Air Act's Section 176(c) (42 USC 7521(a), as amended) under the provisions of 40 CFR 81.327 as it is either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is not covered under the EPA's September 15, 1997 Final Rule on air quality conformity 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 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" under 40 CFR 52.1382(c)(3)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. Recorded occurrences, and/or critical habitat are in the vicinity of the proposed project.	<input checked="" type="checkbox"/>	<input 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 and 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. No significant effects on access to adjacent property or to present traffic patterns would occur.

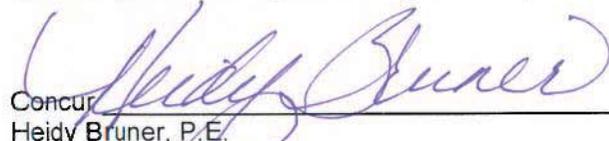
This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (EO #12898). The project also complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 USC 2000d) under FHWA regulations (23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

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



Date: 12/30/10

Eric Thunstrom
Environmental Services Bureau
Great Falls District Project Development Engineer


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

Date: 12/30/10

Concur 
Federal Highway Administration

Date: 30 DEC 2010

Attachment

e-copies without attachment:

- | | |
|----------------------|--|
| Tom Martin, P.E. | Environmental Services Bureau Chief |
| Heidi Bruner, P.E. | Environmental Services Bureau Engineering Section Supervisor |
| Michael P. Johnson | Great Falls District Administrator |
| Kent Barnes, P.E. | Bridge Engineer |
| Paul Ferry, P.E. | Highways Engineer |
| Robert Stapley | Right-of-Way Bureau Chief |
| David W. Jensen | Fiscal Programming Section Supervisor |
| Duane Williams, P.E. | Traffic and Safety Engineer |
| Ivan Ulberg, P.E. | Traffic Project Engineer |
| James Combs, P.E. | Traffic Engineer |
| Suzy Price | Contract Plans Bureau Chief |
| Steve Prinzing, P.E. | Great Falls District Engineering Services Supervisor |
| Stacy Hill, P.E. | Great Falls District Environmental Engineering Specialist |
| Walt Scott | Right-of-Way Bureau Utilities Section |

e-copies with attachment

Montana Legislative Branch Environmental Quality Council (EQC)

copies with attachment:

File Environmental Services Bureau

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 call Montana Relay at 711.



Memorandum

To: Distribution

From: Duane Williams, P.E. *Signed by Duane Williams on 11/16/2010*
 Traffic Engineer

Date: *(Date delivered to Road Design Engineer)*

Subject: HSIP 25(72)
 SF 099 Sun Canyon/Oro Fino
 UPN: 7202000
 Work Type: 310~Roadway and Roadside Safety Improvement

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on 11/16/2010. 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:

- | | |
|---|--|
| Michael Johnson, 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 |
| Robert Stapley, Right-of-Way Bureau Chief | Alan Woodmansey, FHWA - Operations Engineer |
| Paul Ferry, Highways Engineer | |

cc:

- | | |
|--|--|
| Dave Jensen, Fiscal Programming Section Supervisor | Eric Griffin, Public Works Director, Lewis & Clark County, |
| Dustin Rouse, Road Design Area Engineer | 3402 Cooney Drive, Helena, MT 59602 |
| Damian Krings, Road Design Engineer | |

e-copies:

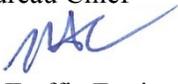
- | | |
|---|---|
| Jim Walther, Engineering, Preconstruction Engineer | Jason Sorenson, Engineering Cost Analyst |
| Lesly Tribelhorn, Highways Design Engineer | Jake Goettle, Construction Bureau – VA Engineer |
| Mark Goodman, Hydraulics Engineer | Steve Prinzing, District Preconstruction Engineer |
| Kurt Marcoux, District Hydraulics Engineer | Christie McOmber, District Projects Engineer |
| Bonnie Gundrum, Env. Resources Section Supervisor | Stan Kuntz, G.F. District Materials Lab |
| Paul Sturm, District Biologist | Kam Wrigg, Butte District Maintenance Chief |
| Eric Thunstrom, G.F. District Environmental Eng. | Walt Scott, R/W Utilities Section Supervisor |
| Danielle Bolan, Traffic Engineer | David Hoerning, R/W Engineering Manager |
| Ivan Ulberg, G.F. District Traffic Project Engineer | Greg Pizzini, Acquisition Manager |
| Pierre Jomini, Safety Management Engineer | Joe Zody, R/W Access Management Section Manager |
| Mary Gayle Padmos, PvMS Engineer | Paul Johnson, Project Analysis Bureau Chief |
| Matt Strizich, Materials Engineer | Sue Sillick, Research Section Supervisor |
| Daniel Hill, Pavement Analysis Engineer | Wayne Noem, Secondary Roads Engineer |
| Lee Grosch, District Geotechnical Manager | Doug Wilmot, G.F. District Construction Engineer |
| Marty Beatty, Engineering Information Services | Jerilee Weibel, District R/W Supervisor |
| Paul Grant, Public Involvement Officer | Dennis Ghekiere, District Utility Agent |
| Jean Riley, Planner | Linda Cline, District R/W Design |



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

Memorandum

To: Duane Williams, PE
Traffic & Safety Bureau Chief

From: James Combs, PE 
Great Falls District Traffic Engineer

Date: October, 20, 2010

Subject: HSIP 25(72)
SF 099 Sun Canyon/Oro Fino
UPN: 7202000
Work Type: 310~Roadway and Roadside Safety Improvement

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

Approved Duane Williams Date November 16, 2010
Duane Williams, P.E.
Traffic & Safety Bureau Chief

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.):
Damian Krings, Road Design Engineer
Dustin Rouse, Road Design Area Engineer
Eric Griffin, Public Works Director, Lewis & Clark
County, 3402 Cooney Drive, Helena, MT 59602

Preliminary Field Review/Scope of Work Report

HSIP 25(72)

Project Manager: James Combs, PE

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Introduction

This project originally included two locations proposed by Lewis and Clark County on their Highway Safety Improvement application. Lewis and Clark County has indicated they have secured funding to improve the Sun Canyon site and our assistance will not be necessary. As such, the safety improvement project between RP 47.7 and 48.0 on off-system county road L-25-401, Sun Canyon Road has been dropped. No Preliminary Engineering funds have been used on L-25-401. This report will contain only information related to L-25-600, Oro Fino Gulch Road.

This report was developed from information taken from the preliminary field review conducted on October 6, 2010 with the following personnel in attendance:

Jonathon Floyd	Helena Traffic Safety Management
Dustin Rouse	Road Design Area Engineer
Paul Sturm	Helena Environmental
Scott Bunton	Helena Road Design-Great Falls
Gerry Brown	Engineering Oversight
James Combs	Great Falls Traffic Engineer
Christie McOmber	District Projects Engineer
Laci Bogden	Great Falls Road Design
Fred Smith	Lewis & Clark County, Sign Leadman

Proposed Scope of Work

This section should provide a very brief description of the proposed scope of work for the project. The project was nominated by Lewis and Clark County as part of the Road Hazard Elimination (STPHS/HSIP) Program to address a crash trend on L-25-600 (Oro Fino Gulch Road/Grizzly Gulch Road) between RP's 5.5 and 5.8.

1. The proposed work includes improving the superelevation through the curve, adding chevrons, and removing trees.
2. This project is being designed in the Great Falls District Design Unit, the ready date will be determined through the override process.
3. MDT has proposed an agreement with Lewis & Clark County to provide signing and gravel at an agreed upon price. Lewis & Clark County forces will be responsible for installation of chevron signs, place and grade gravel, and removal of trees.

Purpose and Need

The intent of this project is to address single-vehicle run-off-the-road crashes.

Project Location and Limits

The project is located in Lewis and Clark County on off-system, local county road L-25-600 also known as Oro Fino Gulch Road or Grizzly Gulch Road. The functional classification is a Rural Minor Collector road designed to Lewis and Clark County Road Standards and AASHTO's Design Guidelines for Rural Major Access, Minor Access, and Recreational and Scenic Roads (250 Vehicles per Day or Less). The project was nominated as a safety project between RP's 5.5 and 5.8; however, the project limits will be changed to RP's 5.5 (Sta. 16+69) and 5.6 (Sta. 10+00) as work is limited to a single curve. The project will be designed from south to north yet route posts increase from north to south.

The project lies within the Helena National Forest in Township 9 North, Range 4 West, Section 21.

As-Built Plans are not available.

Preliminary Field Review/Scope of Work Report

HSIP 25(72)

Project Manager: James Combs, PE

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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. At this time, Work Zone Safety and Mobility requirements will be determined and implemented by Lewis & Clark County. The District has proposed to Lewis & Clark County an agreement to provide signing and gravel at an agreed upon price. County forces will be required to maintain Work Zone Safety and Mobility for this project.

Physical Characteristics

The PTW traverses a rural area through moderately timbered, mountainous terrain. This location is within the Helena National Forest. Per road log data, the roadway is gravel surfaced and 22' wide; assuming two 11' lanes with no shoulders. The surfacing is considered gravel; however, the gravel surface has been used to widen the roadway and the subgrade is exposed. The inside of the curve consists of a 1' deep v-ditch offset approximately 2' from the edge of traveled way with a 0.5:1 or steeper backslope. The outside of the curve consists of 2:1 inslopes into the timber with the ditch bottom approximately 15' below the edge of traveled way.

Traffic Data

2010 ADT	=	130 Present
2012 ADT	=	130 Letting Year
2032 ADT	=	160 Design Year
DHV	=	20
Com Trks	=	Not Available
ESAL	=	Not Available
AGR	=	1.0%

Crash Analysis

The Montana Highway Patrol records show 2 crashes occurring along Oro Fino Gulch Road for the ten-year period from January 1, 2000 thru December 31, 2009. The main crash trend along Oro Fino Gulch Road is single-vehicle run-off-the-road crashes on a curve, resulting in one vehicle overturning and one striking a tree. To address crashes in this area, it was recommended to install chevrons throughout the curve along with re-grading of the road to improve the superelevation and profile of the curve. These safety improvements based on the Consultant's construction cost estimate of \$21,004 generated a benefit-to-cost ratio of 39.73 using the study period from January 1, 1997 through December 31, 2006.

The Safety Management Section does not have statewide averages for comparison of crash rate, severity index and severity rate for off-system routes of Montana. These sites were submitted by Lewis & Clark County Public Works Director Eric Griffin for inclusion in the 2008 Highway Safety Improvement Program, based on a study conducted by Abelin Traffic Services.

In addition to the above Crash Analysis from Safety Management, the 2008 Application for Highway Safety Improvement Program from Eric Griffin states:

This location [Oro Fino Road] has experience[d] six crashes in the last ten years [1997 to 2006]. Three of these crashes resulted in injures[ies] and one resulted in an incapacitating injury. All the crashes occurred on dry roads and half occurred in low light conditions. Four were northbound (downhill) and two were southbound (uphill).

Preliminary Field Review/Scope of Work Report

HSIP 25(72)

Project Manager: James Combs, PE

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Major Design Features

This project was nominated to address a specific crash trend on Oro Fino Gulch Road between approximate RP's 5.5 and 5.8; the project limits have been changed to the roadway between RP's 5.5 and 5.6.

- a. **Design Speed.** According to the Lewis & Clark County Road Design Criteria and using the mountainous terrain design control, the project qualifies for a design speed of 20 mph. According to the 2008 Application for Highway Safety Improvement Program from Lewis & Clark County, the posted speed limited is 25 mph. 35 mph will be the design speed utilized in determining the superelevation correction.
- b. **Horizontal Alignment.** The intent of this project is not to change the horizontal alignment of the roadway beyond improvement of the superelevation. This project consists of a single curve of which the radius is approximately 400' exceeding the Lewis & Clark County Design Criteria minimum of 110' in mountainous terrain.

The existing surface is 24' wide at the ends of the curve. The surface is wider thru the curve. The AASHTO-Guidelines for Geometric Design of Very Low-Volume Roads (ADT \leq 400) states, "NCHRP Report 362 found crash rates for unpaved roads to be lower for narrower roadway widths. Therefore, existing unpaved roads should not generally be widened as a safety measure unless there is evidence of a site-specific safety problem that may be corrected by widening."

Lewis and Clark County Road Standards do not require a superelevation on Local Roads; therefore, the AASHTO-Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT \leq 400) was referred to for superelevation criteria. A superelevation correction was arrived at using Exhibit 5: Guidelines for Maximum Side Friction Factor and Minimum Radius (New Construction, ADT <250 veh/day, Limited Heavy Vehicle Traffic) design speed of 35 mph allows a minimum radius of 300' on a 4% superelevated curve. A superelevation of 4% has been deemed appropriate for this curve to accommodate for the 10% grade.

- c. **Vertical Alignment.** Although a course of gravel will be added to the existing roadway, the intent of this project is not to design a new vertical alignment for the roadway. The existing vertical alignment will be maintained with slight adjustments for superelevation correction, a 0.25' lift of gravel, and blending the proposed gravel surface with the existing surface at the project limits. This project is on a single grade that averages 10%; this grade is below Lewis & Clark County Design Criteria's maximum grade of 11% in mountainous terrain.
- d. **Typical Sections and Surfacing.** The proposed typical section includes returning the finished roadway width to 22', 0.25' of CTS Grade 2 as specified by the Lewis & Clark County in their Road Standards, and adjusting the superelevation to 4%. The design will match the existing cross slope at the connections. Tangent runouts and superelevation runoff will be designed to match the existing field constraints. The existing side slopes will not be adjusted; the surfacing inslope will reflect the 4:1 that the MDT Road Design Manual Cross Section Elements portray for off-system rural roads.
- e. **Geotechnical Considerations.** Geotechnical participation will not be required with this project.
- f. **Hydraulics.** Hydraulic participation will not be required with this project.
- g. **Bridges.** There are no bridges located on this project. Bridge participation will not be required with this project.
- h. **Traffic.** The Traffic section will be requested to provide Chevron signing plans. Lewis & Clark County requested 3 pound, U-channel posts for all signing. Assistance has been offered to Lewis and Clark for locating the chevrons signs.

Preliminary Field Review/Scope of Work Report

HSIP 25(72)

Project Manager: James Combs, PE

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- i. **Pedestrian/Bicycle/ADA.** No ADA, pedestrian, or bicycle improvements will be included with this project.
- j. **Miscellaneous Features.** No miscellaneous features are known at this time. Tree removal may be necessary.
- k. **Context Sensitive Design Issues.** This project is bordered on the south by a private residence and to the north by National Forest Service Land. There are two trees in close proximity to the traveled way that are proposed for removal. Tree removal will be coordinated as necessary with the District Environmental Engineer, the District Biologist, and the United States Forest Service.

Other Projects

STPHS 25(41), Safety Improvements-Grizzly Gulch (UPN 5004001), will consist of slope flattening, signing, and delineation. Safety project 5004001 is located approximately 400' north of this project, 7202000.

Location Hydraulics Study Report

No Hydraulics issues are anticipated with this project.

Design Exceptions

No design exceptions will be addressed with this project.

Right-of-Way

According to the 1923 petition and survey for the roadway as well as the 1938 Grizzly Gulch Road Plat, the right-of-way extends for 30' to the left and right of centerline. No other information is available. No right-of-way involvement is anticipated with this project.

Access Control

This section of roadway is not an access controlled facility.

Utilities/Railroads

Neither utility nor railroad participation will be required with this project.

Intelligent Transportation Systems (ITS) Features

No ITS features will be addressed with this project.

Survey

Survey will not be required for this project.

Public Involvement

At this time, Public Involvement requirements will be determined and implemented by Lewis & Clark County. The District has proposed to Lewis & Clark County an agreement to provide signing and gravel at an agreed upon price. County forces will install chevron signs, place and grade gravel, and possibly remove two trees.

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Environmental Considerations

Two trees along the outside of the curve are in close proximity to the traveled way. The District recommends removing these trees. Trees may be removed between August 15 and April 15. The United States Forest Service will be consulted if necessary.

No waterways will be impacted with this project.

It is anticipated that this safety project will qualify for a categorical exclusion.

Energy Savings/Eco-Friendly Considerations

No Energy Savings/Eco-Friendly Considerations are being considered for this project.

Experimental Features

No experimental features will be addressed with this project.

Traffic Control

Traffic will be maintained throughout the construction of the project with the appropriate signing, flagging, etc. in accordance with the Manual on Uniform Traffic Control Devices. The District has proposed to Lewis & Clark County an agreement to provide signing and gravel at an agreed upon price. County forces will be required to maintain Traffic Control for this project.

Project Management

James Combs, P.E. Great Falls District Traffic Engineer.

This project is not under full FHWA oversight.

Preliminary Cost Estimate

From the nominated construction and engineering costs of \$48,000 for both Oro Fino Gulch Road and Sun Canyon Road, Oro Fino Gulch Road is considered equal to 50% of the project at \$24,000. Per the nominated construction amount, the cost per mile is approximately \$240,000. The estimate assumes costs as if the project were to proceed through the normal design process and let for bid.

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		Estimate	Inflation (INF)	w/INF + IDC
		Costs	(from PPMS)	(from PPMS)
Road work		\$8,605		
Signing		\$1,575		
Traffic Control		\$1,500		
Other		\$400		
Subtotal		\$12,080		
Mobilization	10%	\$1,208		
Subtotal		\$13,288		
Contingencies	5%	\$664		
Total CN		\$13,952	\$2,562	\$18,719
CE	7%	\$977	\$179	\$1,310
IDC: 13.35%			TOTAL	\$20,029
Inflation Factor (ppms)			0.1836	

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 13.35% as of FY 2011.

Since the total CN is less than \$15,000, per the Public Interest Finding, this project can be completed by local forces at an agreed upon price.

Ready Date

The project is being designed in the Great Falls Design Unit and the ready date will be determined through the override process.

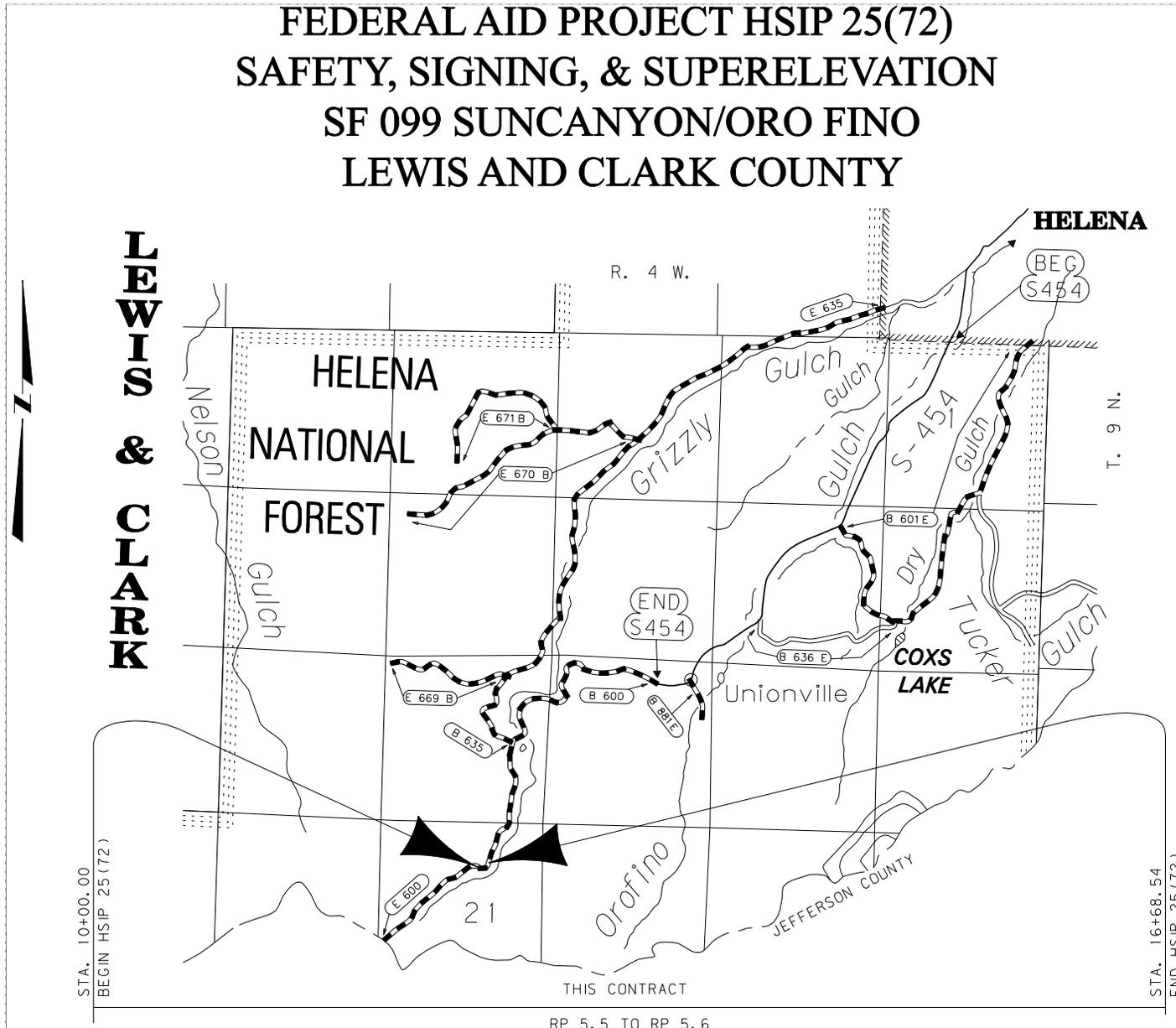
Site Map

The project site map is attached.

Preliminary Field Review/Scope of Work Report

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