



June 3, 2011



Alan Woodmansey, P.E.
Great Falls and Billings Districts Operations Engineer
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59602

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
NH 24-3(46)117
Simms South
Control Number: 7459000

Dear Alan Woodmansey:

The MDT Environmental Services Bureau has reviewed the Preliminary Field Review/Scope of Work Report (PFR/SOW) for the subject project. Based on the completed Environmental Checklist for Pavement Preservation Projects (Checklist), we conclude that the Statewide Programmatic Categorical Exclusion for these types of projects would cover this project. For your information, I have attached a copy of the PFR/SOW (including the location map) and the signed Environmental Checklist. Environmental-related Special Provisions will be included in the contract plans.

If you have questions or concerns, please contact Eric Thunstrom at 444-7648. He will be pleased to assist you.

Sincerely,

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

Attachments: Environmental Checklist, PFR/SOW Report

electronic copies with attachment (Checklist only, unless noted):

Michael P. Johnson	Great Falls District Administrator
Tom Martin, P.E.	Environmental Services Bureau Chief
Heidi Bruner, P.E.	Environmental Services Bureau Engineering Section Supervisor
Eric Thunstrom	Environmental Services Bureau Project Development Engineer
Paul Ferry, P.E.	Highways Engineer
Christie McOmber, P.E.	Great Falls District Projects Engineer
Kevin Christensen, P.E.	Construction Engineer
Suzy Price	Contract Plans Bureau Chief
Dawn Stratton	Fiscal Programming Section
Montana Legislative Branch	Environmental Quality Council (w/ PFR/SOW also)
File	Environmental Services Bureau

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(FOR PROJECTS WITH NO RIGHT-OF-WAY INVOLVEMENT)

Applicant cannot be authorized to proceed with the proposed work until ALL of the conditions of the checklist have been satisfied.

ENVIRONMENTAL CHECKLIST FOR PAVEMENT PRESERVATION PROJECTS

(CRACK SEALING, SEAL & COVER, THIN OVERLAYS, MILL & FILL, PLANT MIX LEVELING, MILL OGFC, MICRO SURFACING, FOG SEAL)

Project No.: 7459000 ID: NH 24-3(46)117 Project Name: Simms South

Reference Post (Station) 116.899 (412+26.8) to Reference Post (Station) 127.475 (975+32.0)

Applicant's Name: Montana Department of Transportation Address: PO Box 201001; Helena, MT 59620-1001

Type of Proposed Pavement Preservation Activity: Crackseal, seal & Cover

Table with 3 columns: Impact Questions, Yes, No, Comment. Contains 13 rows of questions regarding environmental impacts like water quality, wetlands, and air quality. Includes a 'MASTER FILE COPY' stamp.

Checklist prepared by:

Christie W McOmber, PE

Applicant

Project Design Engineer

Title

5/6/2011

Date

Approved by:

Eric Thumotrom

Environmental Services

FOR: HEIDY BRUNER

Title

6/3/2011

Date

(When any of the above questions are checked "Yes")

Project Number: UPN 7459000 ID: NH 24-3(46)117 Designation: Simms South

The Applicant is **not** authorized to proceed with the proposed work until the checklist has been reviewed and approved, as necessary, and any requested conditions of approval have been incorporated.

- A. Complete the checklist items 1 through 7, indicating "Yes" or "No" for each item. Include comments, explanations, information sources, and a description of the magnitude/importance of potential impacts in the right hand column. Attach additional and supporting information as needed. The checklist preparer, by signing, certifies the accuracy of the information provided.
- B. When "Yes" is indicated on any item, the checklist preparer must explain why and provide the appropriate documentation, evaluation, permit, and/or mitigation measures required to satisfy environmental concerns for the project. Use attachments if necessary. **Any proposed mitigation measures will become a condition of approval.**
- C. If the applicant checks "Yes" for any one item, the checklist and MDT's mitigation proposal, documentation, evaluation and/or permit shall be submitted to MDT Environmental Services Bureau. Electronic format is preferred. Contact Number 444-7228.
- D. When the applicant checks a "Yes" item, MDT cannot be authorized to proceed with the proposed work until Environmental Services Bureau reviews the information and signs the checklist.
- E. MDT will obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning the Pavement Preservation Activity.
- F. The links above are provided as a starting point for potential sources of information for completing the checklist. The Applicant is encouraged to consult Environmental Services Bureau and/or other information sources.



Memorandum

To: Distribution

From: Paul R. Ferry, P.E. [Lesly Tribelhorn 5/16/11](#)
 Highways Engineer

Date: May 16, 2011

Subject: NH 24-3(46)117
 Simms South
 UPN: 7459000
 Work Type: 183 ~ Resurfacing-Seal & Cover

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on [5/16/11](#). 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:

- | | |
|---|--|
| Mick 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 |
| Roy Peterson, Traffic and Safety Engineer | Paul Ferry, Highways Engineer |
| Robert Stapley, Right-of-Way Bureau Chief | Alan Woodmansey, FHWA Operations Engineer |
| Jon Swartz, Maintenance Administrator | |

cc:

- | | |
|---|-------------------------------------|
| Dawn Stratton, Fiscal Programming Section | Damian Krings, Road Design Engineer |
| Dustin Rouse, District 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 | Steve Prinzing, District Preconstruction |
| Kurt Marcoux, District Hydraulics Engineer | Christie McOmber, District Projects Engineer |
| Bonnie Gundrum, Env. Resources Section Supervisor | Stan Kuntz, District Materials Lab |
| Paul Sturm, District Biologist | Dave Hand, District Maintenance Chief |
| Eric Thunstrom, District Project Development Engineer | Walt Scott, R/W Utilities Section Supervisor |
| Danielle Bolan, Traffic Engineer | David Hoerning, R/W Engineering Manager |
| James Combs, District Traffic Engineer | Greg Pizzini, Acquisition Manager |
| Kraig McLeod, Safety Engineer | Joe Zody, R/W Access Management Section Manager |
| Stephanie Brandenberger, District Bridge Engineer | Paul Johnson, Project Analysis Bureau |
| Matt Strizich, Materials Engineer | Sue Sillick, Research Section Supervisor |
| Daniel Hill, Pavement Analysis Engineer | Alyce Fisher, Fiscal Programming |
| Lee Grosch District Geotechnical Manager | Jerilee Weibel, District R/W Supervisor |
| Ivan Ulberg, District Traffic Project Engineer | Linda Cline, District R/W Design |
| Marty Beatty, Engineering Information Services | Doug Wilmot, District Construction Engineer |
| Paul Grant, Public Involvement Officer | Dennis Ghekiere, District Utilities Agent |
| Jean Riley, Planner | Dawn Stratton, Fiscal Programming |



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

Memorandum

To: Paul R. Ferry, P.E.
Highways Engineer

From: Christie W. McOmber, P.E. *CWM*
District Projects Engineer

Date: May 16, 2011

Subject: NH 24-3(46)117
Simms South
UPN: 7459000
Work Type: 183 ~ Resurfacing-Seal & Cover

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

Approved Lesly Tribelhorn for Date 5/16/11
Paul R. Ferry, P.E.
Highways 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.):
Damian Krings, Road Design Engineer
Dustin Rouse, Road Design Area Eng. - GTF

Preliminary Field Review/Scope of Work Report

Introduction

This report was derived from information taken from the Preliminary Field Review conducted on April 27, 2011, with the following individuals in attendance:

Steve Prinzing	District Preconstruction Engineer	Great Falls
Christie McOmber	District Projects Engineer	Great Falls
Jeania Cereck	District Design Supervisor	Great Falls
Steve McEvoy	Pavement Analysis	Helena
Gerry Brown	Construction Reviewer	Lewistown
Gary Engman	District West Area Maintenance Superintendent	Great Falls
Dave Trusty	Sun River Maintenance Supervisor	Great Falls
Laci Bogden	Road Designer	Great Falls

Proposed Scope of Work

This project was nominated as a preventative maintenance crack seal and seal and cover. The newly crack sealed roadway will receive a seal and cover to protect the asphalt surface, provide traction, and prevent the crack seal product from being pulled out of the routed grooves by traffic.

All signing will be updated with this project.

Purpose and Need

The intent of this project is to extend the life of the roadway surface by routing and filling longitudinal and transverse pavement cracks. In addition to the longitudinal and transverse cracking that has been observed, the project's existing seal and cover has reached its 10 year life expectancy.

Project Location and Limits

The project is located in Cascade County on MT-200 (N-24) beginning at the Lewis & Clark/Cascade County line at Station 412+26.8 (RP 116.899) continuing eastbound 10.576 miles to the junction with S-565 at Station 975+32.0 (RP 127.475). The functional classification of N-24 is Principal Arterial and the project will be designed to the geometric design criteria for Rural Principal Arterials (NHS-Non Interstate).

The plans for the project will be in English Stationing taken from F-BRF 24-4(8)117. The Stationing increases west to east with the route posts.

Adjacent project NH 24-4(18)127, Simms-Jct US 89, connects to the east end of this project.

The existing horizontal and vertical alignment will be used throughout this project.

As-Builts:

Project ID	From		To		Year Built
	Station	RP	Station	RP	
F-BRF 24-4(8)117	412+26.8	116.899	5+62.0	127.475	1990
NH 24-5(15)117	412+26.8	116.899	975+32.0	127.185	1999
*SFCN 24-4(16)12	960+89.24	127.185	550+00.0	137.847	2001

*metric project

Preliminary Field Review/Scope of Work Report

Work Zone Safety and Mobility

At this time, Level 2 construction zone impacts are anticipated for this project as defined in the Work Zone Safety and Mobility (WZSM) guide. Route N-24 from Bonner to the junction with US-89 is considered a Level 2 Corridor. 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

This project traverses a rural area with rolling to level terrain surrounded mainly by ranching and farm land. The project ends within the town of Simms.

Project History:

In 1990 under project F-BRF 24-4(8)117, the roadway was constructed between Stations 412+26.8 (RP 116.899) and 5+62.0 (RP 127.475). The roadway received 0.95' to 1.40' of crushed base course with a 0.25' lift of plant mix. The resulting roadway surface varied between 32.0' to 44.0'.

In 1999 under project NH 24-5(15)117, the roadway received a 0.15' plant mix overlay between Stations 412+26.8 (RP 116.899) east to Station 975+32.00 (RP 127.185). The resulting roadway surface varied between 31.0' to 43.0'.

In 2001 under metric project SFCN 24-4(16)127, the roadway between Stations 960+89.24 (RP 127.185) and 975+32.00 (RP 127.475) received a 0.15' overlay with seal and cover. Surfacing inslopes of 4:1 were utilized to produce a finished roadway width that varies between 31.0' and 54.0'. The section between Stations 975+32.00 (RP 127.475) and 550+00.00 (RP 137.847) is included in pavement preservation project NH 24-4(18)127, Simms-Jct US 89 (UPN 7462000).

The PvMS Data for survey year 2009 is given in the following table. Construction recommendations for 2010 and 2012 are crack seal, seal and cover.

PVMS INDICES	
RP 116.831 to RP 127.476	
Ride	83.0 (Good)
Rut	97.1 (Good)
Alligator Cracking	100 (Good)
Miscellaneous Cracking	97 (Good)

Traffic Data

Traffic data is not required for this crack seal, seal & cover project.

Crash Analysis

A crash analysis is not required for this crack seal, seal & cover project.

Major Design Features

- a. **Design Speed.** The design speed for Rural Principal Arterials (NHS-Non Interstate) in rolling terrain is 60 mph.
- b. **Horizontal Alignment.** The horizontal alignments will be perpetuated with this pavement preservation project. There are four horizontal curves located within the project limits. The radii vary between 2,865' and 76,394' exceeding the minimum radii of 1,200' as stated in the Geometric Design Criteria for Rural Principal Arterials with a 60

Preliminary Field Review/Scope of Work Report

- mph design speed.
- c. **Vertical Alignment.** The vertical alignments will be perpetuated with this pavement preservation project. Seven grades within the project limits exceed the maximum grade of 4% allowed for Rural Principal Arterials with 60 mph design speed.
 - 1) Grade between stations 562+00 and 576+00 is 6.993%.
 - 2) Grade between stations 678+80 and 690+50 is 4.607%.
 - 3) Grade between stations 690+50 and 705+50 is 7.187% (this grade also exceeds the maximum of 7% for mountainous terrain).
 - 4) Grade between stations 782+00 and 797+50 is 6.152%.
 - 5) Grade between stations 807+00 and 817+00 is 4.955%.
 - 6) Grade between stations 871+40 and 893+80 is 6.980%.
 - 7) Grade between stations 914+40 and 924+50 is 4.891%.
 - d. **Typical Sections and Surfacing.** The project is designed to rout and fill the existing transverse and longitudinal cracks in the asphalt. The project will then receive a seal cover. Per as-built data the majority of the roadway varies between 31.0' and 54.0'.
 - e. **Geotechnical Considerations.** No Geotechnical issues will be addressed with this project.
 - f. **Hydraulics.** No hydraulic issues will be addressed with this project. Five large culverts are located within the project limits.
 - 1) RP 119.30, 8.0' x 110' CSP, Stockpass.
 - 2) RP 119.43, 9.0' x 110' CSP, Simms Creek.
 - 3) RP 121.23, 8.0' x 106' CSP, Stockpass.
 - 4) RP 125.83, 8.0' x 120' CSP, Stockpass.
 - 5) RP 125.95, 12.8' x 8.3' x 128', SSPPA, Fort Shaw Canal.
 - g. **Bridges.** No bridges are located within the project limits.
 - h. **Traffic.** New pavement markings and signing will be required.
 - i. **Pedestrian/Bicycle/ADA.** No new pedestrian/bicycle/ADA improvements were identified for this project.
 - j. **Miscellaneous Features.** No guardrail work will be required with this project.
 - k. **Context Sensitive Design Issues.** There are no Context Sensitive Design issues on this project.

Other Projects

Adjacent to the east side of this project, NH 24-4(18)127, Simms-Jct US 89, will receive a crack seal, seal and cover.

Location Hydraulics Study Report

No LHSR will be required this project.

Design Exceptions

Seven grades exceed the maximum grade of 4% allowed for Rural Principal Arterials with 60 mph design speeds. Due to the nomination as a pavement preservation project, the steep grades will not be addressed.

Right-of-Way

There is no right-of-way involvement for this project.

Access Control

Access control will not be required for this project.

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NH 24-3(46)117, Simms South
Project Manager: Christie W. McOmber

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Utilities/Railroads

There will be no railroad or utility involvement with this project.

Intelligent Transportation Systems (ITS) Features

There are no known ITS solutions that should be designed with this seal and cover project. There are no WIM, ATR, or RWIS sites on the project.

Survey

No survey will be necessary. Estimated plan quantities will be determined from as-builts and field inventory.

Public Involvement

Due to the limited scope of the project, a level "A" public involvement plan should suffice. This will include a news release explaining the project and include a department point of contact.

Environmental Considerations

The project meets the criteria for the Statewide Programmatic Categorical Exclusion for pavement preservation projects. An environmental checklist is being supplied with the Preliminary Field Review/Scope of Work Report.

Energy Savings/Eco-Friendly Considerations

No energy savings/eco-friendly considerations were identified.

Experimental Features

There are no experimental features planned for this project.

Traffic Control

Traffic will be maintained throughout the project during construction with the appropriate signing, flagging, etc. All signing will be in accordance with the Manual on Uniform Traffic Control Devices. Access to residences within the project will be maintained to the maximum extent possible.

Project Management

MDT's Great Falls District Road Design office will be responsible for the road design plans. The Project Design Manager is Christie McOmber. This project is not under full FHWA oversight.

Preliminary Cost Estimate

The estimated cost that has been programmed to construct this project without IDC is \$487,400. However, the preliminary estimate including crack seal, seal, cover, pavement markings, signing, delineation, and traffic control is \$65,788 per mile.

Preliminary Field Review/Scope of Work Report

NH 24-3(46)117, Simms South
 Project Manager: Christie W. McOmber

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		Estimate	Inflation (INF)	w/INF + IDC
		Costs	(from PPMS)	(from PPMS)
Road work		\$470,800		
Signs and delineation		\$12,000		
New Structure		\$0		
Traffic Control		\$35,000		
Subtotal		\$517,800		
Mobilization	10%	\$51,780		
Subtotal		\$569,580		
Contingencies	10%	\$56,958		
Total CN		\$626,538	\$111,796	\$836,902
CE	10%	\$62,654	\$11,180	\$83,690
IDC:	13.35%		TOTAL	\$920,592
Inflation Factor (ppms)		0.178435		

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.

Ready Date

The target ready date for this this project is September 11, 2011 with a letting date of March 2012.

Site Map

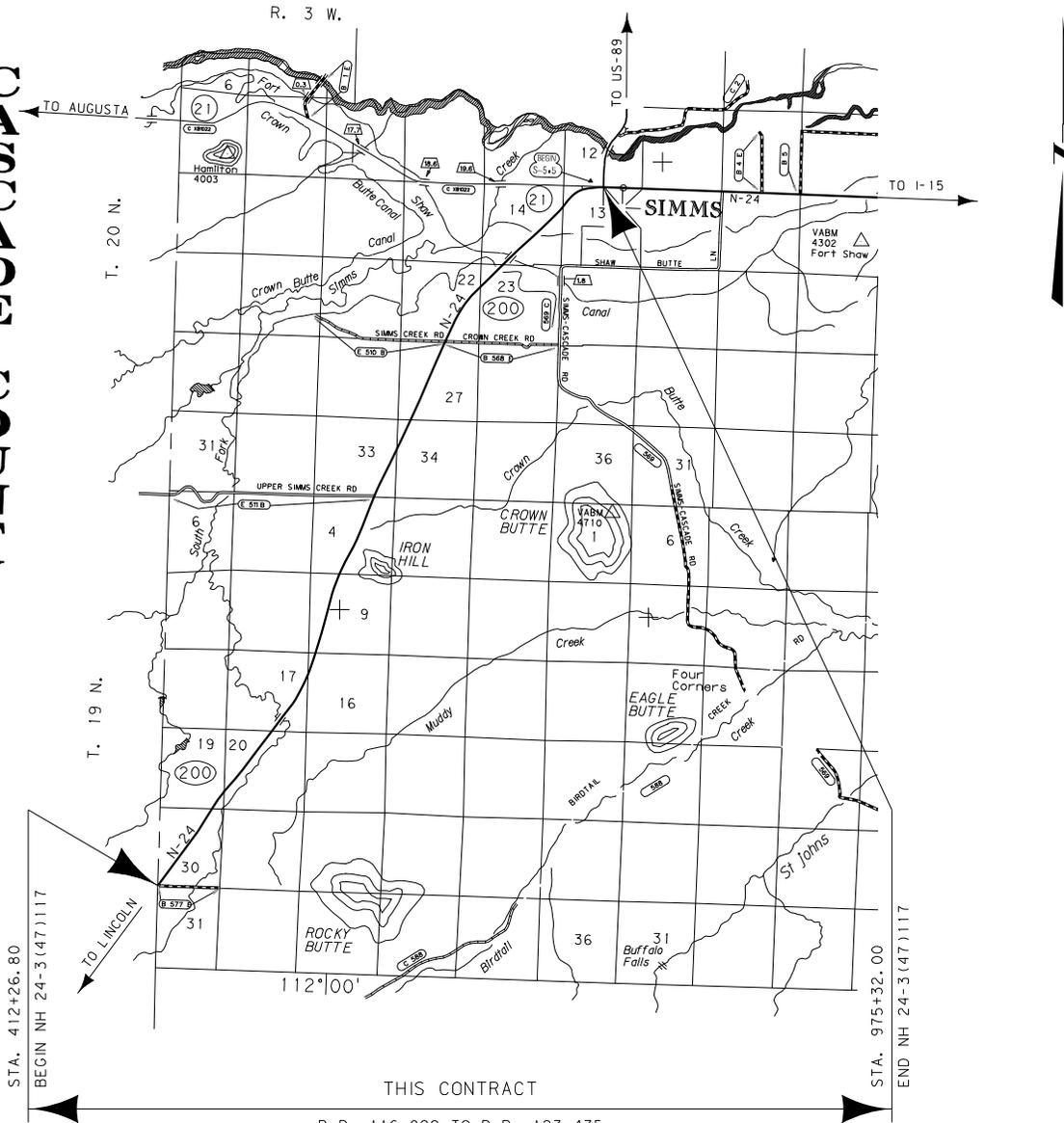
The project site map is attached.

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NH 24-4(47)117 CRACKSEAL, SEAL AND COVER SIMMS SOUTH CASCADE COUNTY

LENGTH 10.57 miles

CASCADE COUNTY



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