



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Michael T. Tooley, Director
Steve Bullock, Governor

November 19, 2014

Brian Hasselbach
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59602



Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
STPS 278-1(32)9
BADGER PASS - EAST
Control Number: 8787000

Dear Brian Hasselbach:

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 Barry Brosten at 444.0804 or me at 444.7203. We will be pleased to assist you.

Sincerely,

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

Attachments: PFR/SOW Report, Environmental Checklist

Enclosure

e-copies w/checklist encl.:

Jeff Ebert, Butte District Administrator
Tom Martin, P.E., Environmental Service Bureau Chief
Heidi Bruner, P.E., ESB Engineering Section Supervisor
Paul Ferry, P.E., Highways Engineer
Suzy Price, Contract Plans Bureau Chief
Lisa Hurley, Fiscal Programming Section Supervisor
Tom Erving, Fiscal Programming
Montana Legislative Branch Environmental Quality Council
File

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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 Number: STPS 278-1(32)9 Control No.: 8787000 Project Name: Badger Pass - East

Reference Post (Station): 8.8 To Reference Post (Station): 14.2

Applicant's Name: MDT - Butte District Address: PO Box 3068; Butte, MT 59702-3068

Type of Proposed Pavement Preservation Activity: Mill, Fill, Seal, & Cover, Pavement Markings

Table with 3 columns: Impact Questions, Yes, No, Comment. Contains 17 rows of questions regarding environmental impacts like wetlands, water quality, and air quality.

Checklist prepared by:

Joe Walsh
Applicant

District Projects Engineer
Title

11/12/2014
Date

Approved by: [Signature]
Environmental Services

Click here to enter text.
Title

11/21/14
Click here to enter a date.
Date

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

Project Number: STPS 278-1(32)9 **Control No.:** 8787000 **Project Name:** Badger Pass - East

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.

Comments regarding Impact Question No. 2a. and 2b.

MDT Environmental Services Biological Resources staff will evaluate the possibility of Threatened and Endangered species in the vicinity of the project area. Appropriate Special Provisions will be included in the Plans Package as necessary.

Comments regarding Impact Question No. 3a, 3b. and No. 4a, 4b

The following statement or an updated version will be included on the NOTES page of the Plan Package:

TEMPORARY EROSION AND SEDIMENT CONTROL

If situations are observed during construction that may potentially impact water quality, including wetland areas, utilize Best Management Practices (BMP) and/or temporary erosion control measures as necessary to protect the resource. Refer to Section 208 of the MDT Detailed Drawings for erosion and sediment control Best Management Practices.

Additionally, the following Special Provision or an updated version will be included in the Plan Package.

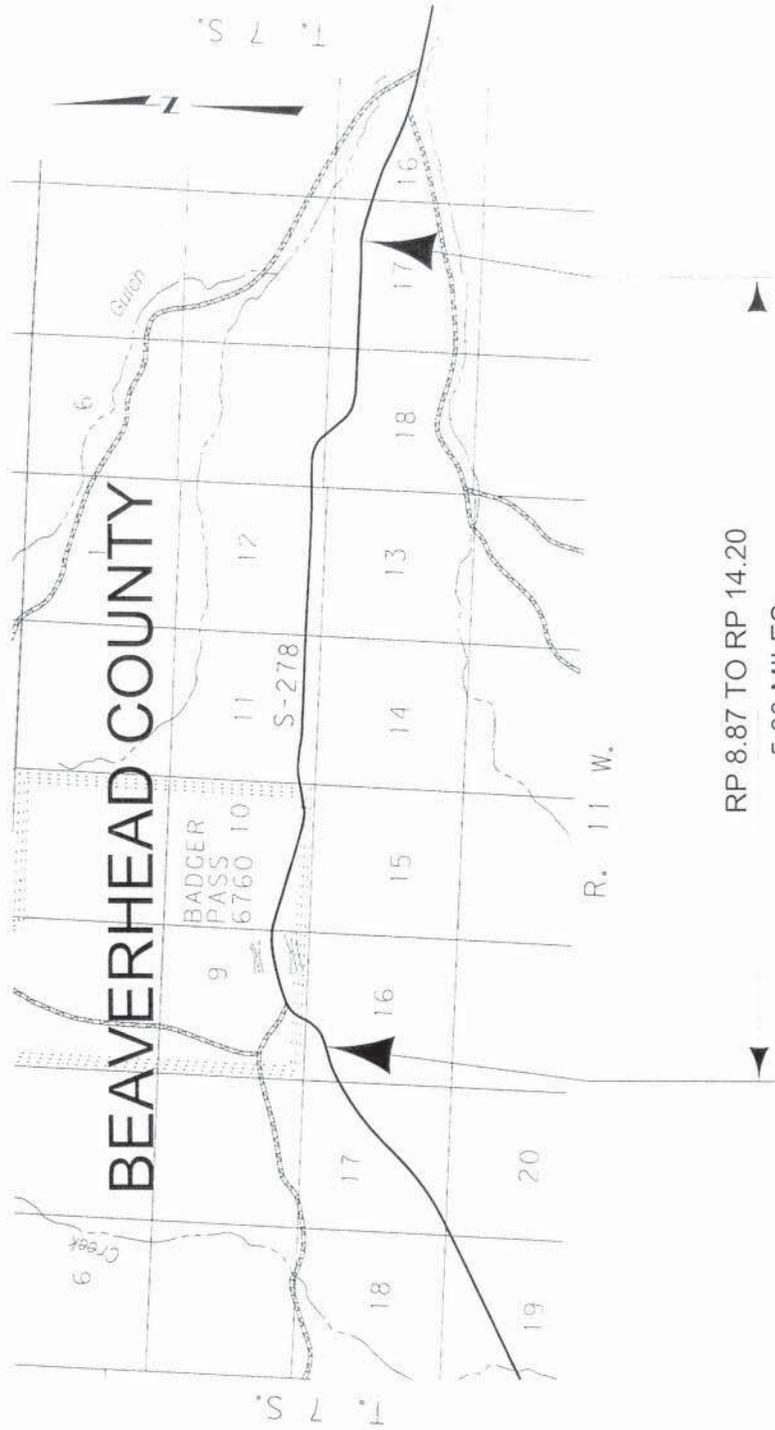
PROTECTION OF WETLAND AREAS AND OTHER DRAINAGES

Impacts to any and all wetland areas and other drainages including spring, perennial, ephemeral or intermittent drainages, streams and rivers, located adjacent to the project are not anticipated in association with this project. MDT has NOT acquired any water quality permits or authorizations, including a Clean Water Act Section 404 permit (COE), a Stream Protection Act 124 notification (MFWP), or a 318 Authorization (DEQ). Therefore, impacts to any and all wetland areas and other drainages located adjacent to the project are not permitted. Avoid all equipment traffic, fill material, staging activities and other disturbances to the wetland areas and other drainages.

If complete avoidance of all impacts to these areas is not possible, contact the District Biologist at 444-0461 or the Construction Permit Coordinator at 494-9612, so that the proper permits can be secured prior to working in these areas. Any impacts to these areas and associated consequences, without the proper permitting, are the responsibility of the Contractor.

BADGER PASS - EAST
UPN: 8787000

R. 11 W.





Memorandum

To: Distribution

From: Paul Ferry, P.E., Highways Engineer

Date: November 12, 2014

Subject: STPS 278-1(32)9
 Badger Pass - East
 UPN-8787000
 Work Type 180 Pavement Preservation

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

Jeff Ebert, Butte District Administrator
 Kent Barnes, Bridge Engineer
 Paul Ferry, Highways Engineer
 Roy Peterson, Traffic and Safety 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
 Jon Swartz, Maintenance Administrator
 Jeff Patten – FHWA (PODI)

cc:

Joe Walsh, Project Design Manager, Butte District
 Master file

Dawn Stratton, Fiscal Programming Section
 Damian Krings, Road Design Engineer
 Local Government Officials

e-copies:

Jim Walther, Engineering, Preconstruction Engineer
 Lesly Tribelhorn, Highways Design Engineer
 Mark Goodman, Hydraulics Engineer
 Walt Ludlow, Butte District Hydraulics Engineer
 Bill Semmens, Env. Resources Section Supervisor
 Deb Wambach, Butte District Biologist
 Barry Brosten, Butte District Project Development Engineer
 Danielle Bolan, Traffic Operations Engineer
 Ivan Ulberg, Traffic Design Engineer
 Leroy Wosoba, Butte District Traffic Project Engineer
 Kraig McLeod, Safety Engineer
 Nathan Haddick, Bridge Area Engineer, Butte District
 Michael Grover, Engineering Cost Analyst
 John Pirre, Engineering Information Services
 Paul Grant, Public Involvement Officer
 Sue Sillick, Research Section Supervisor
 Suzy Price, Contract Plans Bureau Chief
 Matt Wagner, Engineering Division
 Alyce Fisher, Fiscal Programming
 Dawn Stratton, Fiscal Programming Section
 Angela Zanin, Bicycle/Pedestrian Coordinator
 Matt Maze, ADA Coordinator

Jake Goettle, Construction Bureau – VA Engineer
 Dustin Rouse, Butte District Preconstruction
 Joe Walsh, Butte District Projects Engineer
 Mike Walsh, Butte District Materials Lab
 Kam Wrigg, Butte District Maintenance Chief
 Therese Iwaniak, Butte District Right of Way Supervisor
 Phillip Inman, Utilities Engineering Manager
 David Hoerning, R/W Engineering Manager
 Greg Pizzini, R/W
 Joe Zody, R/W Access Management Section Manager
 Matt Strizich, Materials Engineer
 Jim Davies, Pavement Analysis Engineer
 Darin Reynolds, Surfacing Design Supervisor
 Jeff Jackson, Geotechnical Engineer
 Patrick McCann, Butte District Geotechnical Manager
 Nicholas Jaynes, Butte District Geotechnical
 Bryce Larsen, Supervisor, Photogrammetry & Survey
 Paul Johnson, Project Analysis Bureau
 Jean Riley, Planner
 Wayne Noem, Secondary Roads Engineer
 Michael Murphy, Eng. Manager, Bridge Management System
 Duane Williams, Motor Carrier Services Division Administrator

Bill Rabey, Environmental
Marisa Mailand, Road Log Manager

Becky Duke, Traffic Data Collection Section Supervisor (WIM)
Doug McBroom, Maintenance Division Operations Manager (RWIS)



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

Memorandum

To: Paul Ferry, P.E.
Highways Engineer

From: Dustin Rouse, P.E.
District Engineering Services Engineer

Date: November 12, 2014

Subject: STPS 278-1(32)9
Badger Pass - East
UPN-8787000
Work Type 180 Pavement Preservation

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

Approved Paul Ferry Date 11-13-14
Paul 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, P.E. Engineering Services Supervisor

Preliminary Field Review/Scope of Work Report

STPS 278-1(32)9, Badger Pass - East
Project Manager : Joe Walsh

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Introduction

A Preliminary Field Review was held on August 22th, 2014 for the above noted project.

In attendance were:

Jennifer Nelson – Butte Design Manager – Helena
Greg Ziehen – Pavement Analysis – Helena
Mark French – Butte Design Supervisor - Helena
Dustin Rouse – District Engineering Services Supervisor – Butte
Geno Liva – Construction Operations Engineer - Butte
Joe Walsh – Project Manager – Butte
Kevin Mueller – Design Supervisor – Butte
Deb Wambach – Environmental – Helena
Randy Perkins – Designer – Butte
Jason Brazill – Designer - Butte
Russ Sutton – Maintenance - Dillon

Proposed Scope of Work

The project was nominated as a mill and fill pavement preservation project. The proposed work will consist of cold milling the existing pavement full width to a pavement depth of 0.10' then replacing it with 0.15' plant mix surfacing maintaining a 28' top width. This project will include seal & cover, delineation and pavement markings.

Purpose and Need

The purpose of the project is to extend the service life of the highway, provide additional skid resistance and take a cost-effective action to preserve and maintain the existing highway.

Project Location and Limits

The project is located in Beaverhead County on Secondary 278. The project begins at RP-8.8 in Sec. 17, T7S, R10W and extends west to RP-14.2 in Sec. 16, T7S, R11W. The project length is 5.4 miles.

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 Transportation Management Plan (TMP) will consist of a Traffic Control Plan (TCP).

Physical Characteristics

1. As-built Projects
SFCS 278-1(18)0 - Seal & Cover – 2002

2. Surfacing information is provided below:

<u>From</u>	<u>To</u>	<u>Top Thickness</u> <u>(PMS) (in)</u>	<u>Bottom</u> <u>Thickness</u> <u>(CAC) (in)</u>	<u>Top Width (ft)</u>
RP 8.6	RP 14.2	4.2	13.8	28

3. Existing Roadside Geometrics: The horizontal and vertical alignments will be perpetuated for this project. The terrain is rolling in a rural area. The functional classification is Minor Arterial

Preliminary Field Review/Scope of Work Report

STPS 278-1(32)9, Badger Pass - East
 Project Manager : Joe Walsh

4. PvMS Index Numbers & Recommended Treatment:

Section	Ride	Rut	ACI	MCA	Construction		Maintenance	
					2014	2016	2014	2016
RP 8.796 to RP 24.69	62.4	75.9	96.7	94.8	C_AC Thin Overlay	C_AC Thin Overlay	M_AC Thin Overlay	M_AC Thin Overlay

Traffic Data

The traffic data for S-287 from RP 8.87 to RP 14.2;

- a. 2014 AADT = 980
- b. 2016 AADT = 1040
- c. 2036 AADT = 1730
- d. DHV = 230
- e. T = 4.0%
- f. EAL = 26
- g. AGR = 2.6%

Crash Analysis

The crash analysis for the subject project as requested by memorandum dated August 19, 2014 is summarized below. The analysis is for State Secondary Route 278 from reference post 008+0.866 to reference post 014+0.201.

The Montana Highway Patrol records show 6 total crashes along this section of roadway for the dates January 1, 2004 through December 31, 2013. Three of these crashes were roadway departure crashes involving a vehicle leaving the roadway and overturning. Of the road departure crashes, two occurred on the curve from RP 14.05-14.15. One crash occurred in the westbound direction and one occurred in the eastbound direction.

Two of the crashes also involved vehicles being struck by and/or avoiding a tire in the roadway that came loose from an approaching vehicle. The remaining crash was a wild animal-vehicle collision involving a moose.

Also, five of the six crashes involved an eastbound vehicle. The severity of crashes resulted in a non-incapacitating injury crash with two non-incapacitating injuries and 5 property damage only crashes.

This section of roadway is performing at a Level of Service of Safety (LOSS) II for all crashes, fatal and injury crashes, road departure crashes, and fatal and injury road departure crashes.

This LOSS indicates a low to moderate potential for crash reduction. Given the low number of crashes, a crash pattern analysis was not performed.

The Safety Engineering Section has not identified any crash clusters on this segment of roadway.

Major Design Features

- a. **Design Speed:** The design speed for this project is 50 mph based on MDT standards for Secondary system roads in rolling terrain. The posted speed for cars and light trucks is 70 mph/65 mph night and 60 mph/55 mph night for heavy trucks.
- b. **Horizontal and Vertical Alignment.** The horizontal and vertical alignments will be perpetuated with this pavement preservation project.
- c. **Typical Sections and Surfacing.** There are no proposed changes to the typical sections as this is a mill, fill, and seal & cover project.

Preliminary Field Review/Scope of Work Report

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Project Manager : Joe Walsh

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The Butte Lab cored the existing pavement to determine the thickness. 6 of the cores were less than 0.25'. With this information a mill of 0.10' is proposed with a 0.15 overlay. Shoulder gravel will be needed to maintain a 28' top width.

- d. **Geotechnical Considerations.** No Geotechnical considerations are anticipated on this project.
- e. **Hydraulics.** No Hydraulic considerations are anticipated on this project.
- f. **Bridges.** There are no bridges on this project.
- g. **Traffic.** New Pavement markings and delineation will be included on this project. Signing will be determined by the traffic section.
- h. **Pedestrian/Bicycle/ADA.** No impacts to pedestrian facilities are anticipated.
- i. **Miscellaneous Features.** There are no miscellaneous features on this pavement preservation project. There is currently no guardrail within the project limits and none will be added with this project. There are also no existing rumble strips on the project and due to the narrow shoulder and limited number of crashes, none will be added.
- j. **Context Sensitive Design Issues.** There are no context sensitive design issues associated with this project.
- k. **Cold Millings.** Cold millings that are not used on this project will be given to the county.

Other Projects

There are no other projects associated with this pavement preservation project.

Location Hydraulics Study Report

There will be no hydraulic involvement on this project.

Design Exceptions

No design exceptions are anticipated with this project.

Right-of-Way

No R/W involvement is required on this pavement preservation project.

Access Control

Access Control is not being implemented for this project.

Utilities/Railroads

No railroad or utilities will be affected by this project.

Maintenance Items

There were no Maintenance items identified during the field review of this project.

Intelligent Transportation Systems (ITS) Features

ITS will not be pursued on this project.

Preliminary Field Review/Scope of Work Report

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Project Manager : Joe Walsh

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Survey

No survey is anticipated for this project. If survey is required the Butte District Road Design Section will obtain the necessary information.

Public Involvement

Level A

1. News release explaining the project and including a department point of contact.

Environmental Considerations

This project meets the criteria for a statewide programmatic categorical exclusion under the pavement preservation agreement with FHWA. We are submitting a pavement preservation checklist for this project. As proposed, no CWA 404 permit or SPA 124 notifications are anticipated for this project. The Protection of Aquatic Resources special provisions will be included in the bid package for this project.

Energy Savings/Eco-Friendly Considerations

No energy saving/eco-friendly considerations are associated with this pavement preservation project.

Experimental Features

No experimental features will be utilized with this project.

Traffic Control

Traffic will be maintained on the roadway during construction. Appropriate traffic control devices and signing will be used throughout the project in accordance with the *Manual of Uniform Traffic Control Devices*.

The Transportation Management Plan (TMP) will consist of a Traffic Control Plan (TCP) only.

Project Management

The Butte District Road Design will develop the plans and Joe Walsh will be the Project Design Manager. This is not a Project of Division Interest for FHWA.

Preliminary Construction Cost Estimate

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	1,400,000		
Traffic Control	50,000		
Subtotal	1,450,000		
Mobilization (10%)	145,000		
Subtotal	1,595,000		
Contingencies (8%)	127,600		
Total CN	\$ 1,722,600	\$256,769	\$ 2,160,085
CE (10%)	\$172,260	\$25,677	\$216,009
TOTAL CN+CE	\$1,894,860	\$282,446	\$2,376,094

The estimated cost \$2,376,074 (CN+CE+INF+IDC) = \$445,796 per mile

Preliminary Field Review/Scope of Work Report

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Project Manager : Joe Walsh

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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 9.13% as of FY 2015.

Preliminary Engineering

The nominated PE should be sufficient.

Project and Risk Management

At this time this project would be considered a low risk project for costs and schedule.

Ready Date

This project has a ready date of December 2014. The project is currently red in OPX2.

Site Map

The project site map is attached.

Preliminary Field Review/Scope of Work Report

STPS 278-1(32)9, Badger Pass - East
Project Manager : Joe Walsh

