



Montana Department of Transportation

RECEIVED

Jim Lynch, Director

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

JUL 11 2006

Brian Schweitzer, Governor

July 6, 2006

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Carl James
Federal Highway Administration (FHWA)
585 Shepard Way
Helena, MT 59601-9785

MASTER FILE
COPY

**Subject: Statewide Pavement Preservation Project
RYEGATE - WEST
NH 14-4(22)125
CN 5974000**

Dear Carl James:

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 have determined 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 Checklist.

If you have any questions or concerns, please contact Heidy Bruner at 444-7203. She will be pleased to assist you.

Sincerely,

Thomas L. Hansen, PE
Engineering Section Supervisor
Environmental Services Bureau

cc (w/o attach): Bruce Barrett MDT, Billings District Administrator
Jean A. Riley, PE MDT, Environmental Services Bureau Chief
Paul Ferry, PE MDT, Highway Engineer
Mark Wissinger, PE MDT, Construction Engineer
Suzy Price MDT, Contract Plans Bureau Chief
Dave Jensen MDT, MDT Fiscal Programming Section Supervisor
Heidy Bruner MDT, Environmental Services

cc (w/attach): Alan Woodmansey, PE FHWA, Operations Engineer
Montana Legislative Branch Environmental Quality Council (EQC)
Golden Valley County
File

encl.

TLH:hsb:S:\PROJECTS\BILLINGS\5000-5999\5974\5974ENCEDCSP1_PAVE PRES.DOC



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

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JUN 14 2006
ENVIRONMENTAL

Memorandum

To: *L* Jean A. Riley, P.E.
Chief - Environmental Services Bureau

From: *for* Paul R. Ferry, P.E. *LT*
Highways Engineer

Date: June 8, 2006

Subject: NH 14-4(22)125
Ryegate-West
Control No. 5974000
Project Work Type - 181 - Resurfacing-Asphalt

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

Please send the notification for the environmental documentation to the FHWA. If you need additional information, contact Gary Neville at 657-0232.

PRF.rjn

Attachments

cc:
Paul Ferry
Tom Hansen
Highways File

(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.: 5974000 ID: NH 14-4(22)125 Project Name: Ryegate-West

Reference Post (Station) 124.95 to Reference Post (Station) 130.42

MASTER FILE COPY

Applicants Name: Montana Department of Transportation Address: 2701 Prospect Ave., Helena, MT 59620

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

IMPACTS ON THE PHYSICAL ENVIRONMENT (TO BE COMPLETED BY APPLICANT)

Table with 2 main columns: Impact Questions and [Y/N] There are Potential Impacts; or Item Requires Documentation, Evaluation, Mitigation Measures, and/or (a) Permit(s). Rows include questions about rivers, species, water quality, wetlands, hazardous waste, and Indian Reservations.

8. Magnitude and significance of potential impacts: To be completed by applicant. The proposed project does not have any potential impacts, and the Statewide Programmatic Categorical Exclusion for Pavement Preservation projects is the appropriate Environmental Document for the proposed work.

Checklist prepared by: Gary Neville, Billings District Engineering Services Supervisor Applicant (Design Project Manager) Title ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR Date 6/07/06

Approved by: [Signature]

7/6/06

Environmental Services

Title

Date

(when items 1, 2, 3, 3a, 4, 4a, 4b, 5, 6, 6a, or 7 are checked "Yes")

- A. The applicant shall complete the checklist indicating a "Yes" or "No" for each item, except number 8 which may require a narrative response.
- B. When a "Yes" is indicated on any number of items 1 through 7, MDT 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.
- 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. 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 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.





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

Memorandum

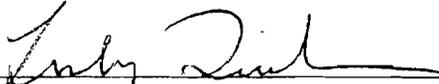
To: Paul Ferry, P.E.
Highways Engineer

From: Gary Neville
Billings District Engineering Services Supervisor

Date: June 8, 2006

Subject: **NH 14-4(22)125**
Ryegate-West
Control No. 5974000
Project Work Type – 181 – Resurfacing-Asphalt

We request that you approve the Preliminary Field Review Report/Scope of Work Report for the subject project.

Approved  Date 6/9/08
for Paul R. Ferry, P.E.
Highways Engineer

We are requesting comments from those on the distribution list. We will assume their concurrences if no comments are received within **two weeks** of the approval date.

Distribution: (with attachment)

James Walther – Helena – Preconstruction Engineer	Mark Goodman – Helena – Hydraulics
Damian Krings – Helena – Road Design Engineer	Danielle Bolan – Helena – Traffic
Dave Jensen – Helena – Fiscal Programming	Jim Mullins – Helena – Right-of-Way
Bryce Larsen – Helena – Photogrammetry	Bonnie Steg – Helena – Environmental
Gary Larson – Helena – Planning	Walt Scott – Helena – Utilities
Pierre Jomini – Helena – Traffic-Safety	Jon Watson – Helena – Surfacing
Alice Flesch – Helena – ADA Coordinator	Pamela Langve-Davis – Helena – Planning
Greg Pizzini – Helena – Access Management	Sue Sillick – Helena – Research
Sue Rowell – Helena – Eng. Info. Services	
Cameron Kloberdanz – Helena – Geotechnical Manager	
Highways File	

Preliminary Field Review/Scope of Work Report

The Preliminary Field Review was conducted on April 4, 2006. The following personnel participated in this review:

Gary Neville	District Eng Services Supervisor	Billings
Ryan Dahlke	District Design Manager	Helena
Rodney Nelson	District Projects Engineer	Billings
Aaron Eschler	District Design Supervisor	Billings
Sarah Muessig	District Designer	Billings
Doug Lutke	District Maintenance Engineer	Lewistown
Dan Hill	Materials Bureau	Helena
Jin Nelson	Bridge Bureau	Helena
Gerry Brown	Construction Eng Services Bureau	Helena

Proposed Scope of Work

The proposed project was nominated as a pavement preservation project. The as-built plans for this section of roadway detail a 0.15' future overlay with a 28' top surfacing width. It was determined during the field review the roadway needs to be milled to eliminate ruts in the existing surface. The following is the proposed scope of work:

- Mill 0.10'
- Overlay 0.20'
- Seal and Cover
- New Pavement Markings
- Upgrade guardrail terminal end sections
- Upgrade signing as needed

Project Location and Limits

The nominated project limits are RP 124.95 to RP 130.42 on National Highway Route 14 in Golden Valley County. The town of Ryegate is located within the project limits from RP 129.5 to RP 130.4.

Physical Characteristics

1. As-Built:

NH 14-4(11)125 Widen/Reconstruction Project in 1994

Rut filled and crack sealed in 1999, then chip sealed in 2000 with a Maintenance Project

2. Existing Roadway Surfacing:

According to the Montana Road Log and As-builts plans:

Surface Width: 30'

Surface Thickness: 4.2"

Base Thickness: 13.8"

3. Existing Roadside Geometrics:

According to as-built plans:

6:1± surfacing inslopes with variable cut and fill slopes.

Traffic Data

2006	ADT (Present)	=	1,700
2007	ADT (Letting)	=	1,730
2027	ADT (Design)	=	2,730
	DHV	=	370
	Com Trks	=	19.4 %
	ESAL	=	228
	AGR	=	2.3 %

Accident History

The following is a comparison of the study area rates/indices and statewide average rates/indices for the period of 1/1/95 to 12/31/04:

	Statewide Average	Study Area
All vehicles accident rate	1.24	0.79
All vehicles severity index	2.31	2.50
All vehicles severity rate	2.88	1.98
Truck Accident Rate	1.07	0.50
Truck Severity Index	2.27	1.00
Truck Severity Rate	2.43	0.50
Truck Accidents	3	
Total Recorded Accidents	24	

Variations from average occurrence:

- 16.7% Dark-Not Lighted (Light Condition) vs. 34.2% rural Non Interstate National Highway System average.

Accident Clusters or Safety Projects:

No accident cluster locations were identified during the ten-year study period based on the criteria of the Safety Engineering Improvement Program and the information from the Safety Management System.

Remarks:

Verify that the striped yellow and black sheeting, slanted per MUTCD, has been installed on the end plates of the ET-2000 guardrail end treatments.

Verify the vertical clearance of the overhead flasher in Ryegate.

Upgrade signing.

PvMS Recommendation

The PvMS 2005 Pavement Conditions and 2006 Pavement Treatments Report shows the recommended treatment for this section of N-14 as "Do Nothing". The performance indexes are as follows.

<u>Ride Index</u>	<u>Rut Index</u>	<u>Alligator Cracking Index</u>	<u>Misc. Cracking Index</u>
80.1 (Good)	55.8 (Fair)	100.0 (Good)	97.1 (Good)

Major Design Features

Design Speed- This section of the roadway is classified as "National Highway System – Non-Interstate" with level terrain in a rural environment. The design speed shall be 70 mph. The posted speed limit is 70 mph and 50 mph through Ryegate.

Horizontal and Vertical Alignments- The existing horizontal and vertical alignments will be used as is.

Typical Sections- The route segment plan width for this location is 40'. The existing width is 30' and it is proposed to maintain this width by using millings as shoulder gravel on a 4:1 slope. Therefore, the top surfacing width shall be 30' and will include 12' travel lanes and 3' shoulders. The surfacing inslopes will be 4:1. The 2006 Pavement Treatments Report shows the recommended treatment for this section of N-14 as "Do Nothing". The 2004 Pavement Treatment Report shows the recommended treatment as "Crack Seal and Cover". There has not been any work done on the road since 2000 when Maintenance filled ruts, crack sealed and sealed and covered. This section of N-14 is beginning to rut again thereby justifying a mill and overlay treatment.

Grading- No grading is planned for this project with the exception of a minor amount of grade to drain discussed in the Hydraulics section below.

Geotechnical Considerations- No geotechnical considerations are planned.

Hydraulics- There is a drainage issue on the North side of the subject highway at RP 129.7. As-builts for the previous widening project show an approach pipe at this location that would allow drainage past this approach/into the picture. It appears this pipe was never installed or has been covered up. Trucks have been observed using this location for parking. It is proposed to remove the pavement from the street approach to the right of way. Then grade and pave the street approach to allow a water passage across on top with the ditch graded to drain.



Bridges- There are no bridges located within the project limits.

Safety Enhancements- All guardrail terminal end sections will be upgraded to current design standards. The vertical clearance of the overhead flashing light in Ryegate was verified at 16'-3". Verification of proper markings on the end plates of existing ET-2000's was attempted. However, no existing ET-2000's were found within the project limits. Traffic has been requested to review all signs and delineators for upgrading if needed.

Rumble Strips- Rumble strips will not be installed on this project consistent with current MDT design standards.

Pedestrian/Bicycle/ADA- There is no sidewalk within the right-of-way of this project. However, there is a signed and marked pedestrian crossing at the flashing light in Ryegate. New pavement markings in conjunction with signing and the flashing light shall identify the pedestrian crossing. No additional features or upgrades are proposed.

Traffic- All new pavement markings will be required for this project. Traffic is to determine if any or all of the signs and delineators need to be upgraded. No work to the flashing light in Ryegate is proposed.

Guardrail-All terminal end sections will be upgraded to current design standards.

Fencing- No fencing is being proposed on this project.

Miscellaneous-Two portable MCS scale sites (RP 125.82 & RP 128.37) and one historical monument site (RP 130.21) are located within the project limits. Each scale site contains a 12' by 12' concrete pad. The pavement for these sites is in good shape and is receiving very little traffic. These sites will not be milled and/or paved but will receive a seal and cover. All private and public approaches are to be paved to the right of way but will not receive a seal and cover. Due to the difference in the milling and paving depth, any existing paved approaches will need to be milled and paved. Milled tapers will be needed for both ends of the projects, the two scale sites, the historical monument site and for existing paved approaches. Field approaches not already paved will receive a 3' strip of pavement. Pavement millings not used for guardrail widening and shoulder gravel on this project will be given to MDT maintenance or Golden Valley County.

Design Exceptions

No design exceptions are anticipated at this time.

Right of Way

No new right of way is required for this project.

Access Control

Access Control is not being implemented on this project.

Utilities/Railroad

No utility or railroad impacts are anticipated.

Environmental Considerations

Environmental Considerations

A programmatic categorical exclusion has been prepared for this project. Any guardrail widening required as a result of upgraded terminal end sections shall be located to prevent any impacts to wetlands. The area of disturbance for this project shall be less than 5 acres.

Traffic Control

Traffic will be maintained on the present traveled way during construction. All signing and flagging will be in accordance with the Manual of Uniform Traffic Control Devices.

Survey

Survey is going to be required for a grade to drain design at RP 129.7 previously discussed under the Hydraulics section of this report. A Survey Request Form is attached for this project.

Public Involvement

The Public Involvement Plan will be level A. This will include a news release explaining the project and a MDT point of contact.

Cost Estimate

The cost estimate shown below does not include indirect costs.

Road Work*	\$ 920,000
Mobilization (15%)	\$ <u>138,000</u>
Subtotal	\$ 1,058,000
Contingencies (10%)	\$ 106,000
Subtotal	\$ 1,164,000
Inflation (3% per year x 1 year)	\$ <u>35,000</u>
Total CN	\$ 1,199,000
CE (10%)	\$ 120,000

* (\$9.50 per sq yd of roadway that includes overlay, milling, seal and cover, guardrail upgrades, grade to drain work, pavement markings and minor sign upgrades)

Ready Date

The current ready date shown in OPX2 for this project is July 1, 2006.

Project Management

Gary Neville is the design project manager for this project.

Attached: Site Map
Survey Request Form

