



December 30, 2011

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

**MASTER FILE  
COPY**

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects  
STPS 240-1(7)0  
Chinook-South  
Control Number: 7641000

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,

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

HB:ejt: S:\PROJECTS\GREAT-FALLS\7000-7999\7641\7641000ENCED001.DOC

**(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.: STPS 240-1(7)0 ID: UPN 7641000 Project Name: Chinook - South

Reference Post (Station) RP 0.0 to Reference Post (Station) RP 6.8

Applicants Name: Montana Department of Transportation Address: PO Box 201001, Helena, MT 59620-1001

Type of Proposed Pavement Preservation Activity: Work Type: 183-Resurfacing-Seal & Cover

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

Impact Questions	[Y/N] There are Potential Impacts; or Item Requires Documentation, Evaluation, Mitigation Measures, and/or (a) Permit(s).			
	Yes	No	Comment or List Documentation, Evaluation, Mitigation Measure, and/or (a) Permit(s) Required for Items 1 through 7.(Use attachments if necessary)	
1. Does the proposed action require work in, across, and/or adjacent to a river which is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system. (See listing on page 3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>MASTER FILE COPY</b>	
2. Are there any recorded occurrences, and/or critical habitat for Federally-listed Threatened and Endangered Species in the vicinity of the proposed activity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Does the proposed action have an impact on water quality? If answer is NO go to question 4.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3a. If the answer to number 3 is yes, is a Clean Water Act ' Section 402 permit required? (MPDES issued by MDEQ)	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/> N/A
4. Does the proposed project have impacts to wetlands or waters of the U.S.? If answer is NO go to question 5.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
4a. If the answer to number 4 is yes, is a Clean Water Act ' 404 permit authorization required?	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/> N/A
4b. If the answer to number 3 or 4 is yes, is a Stream Protection Act ' 124SPA permit required? (Issued by MDFWP)	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/> N/A
5. Does the proposed project involve hazardous waste site[s]? (Superfund, spills, underground storage tanks, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
6. Is the proposed activity on and/or within approximately 1.6 Km (1 mile) of an Indian Reservation? If answer is NO go to question 7.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
6a. Are any Tribal water permits required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A	
7. Is the proposed project in a "Class I Air Shed" (Some Indian Reservations)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A	

8. Magnitude and significance of potential impacts: To be completed by applicant.

Checklist prepared by: Christie McOmber District Project Engineer December 15, 2011

Approved by: *[Signature]*  
Applicant

ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR  
Title

12/30/11  
Date

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's Wild and/or Scenic Rivers system as published by the U.S. DEPARTMENT OF AGRICULTURE (USDA), or the U.S. DEPARTMENT OF THE INTERIOR (USDoI)

- 1 Middle Fork of the Flathead River (headwaters to South Fork of the Flathead River confluence)
- 2 North Fork of the Flathead River (Canadian Border to Middle Fork of the Flathead River confluence)
- 3 South Fork of the Flathead River (headwaters to Hungry Horse Reservoir)
- 4 Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge)



**Memorandum**

To: Distribution

From: Paul R. Ferry, P.E. *Lesly Tribelhorn 12/15/11*  
 Highways Engineer

Date: *December 14, 2011*

Subject: STPS 240-1(7)0  
 Chinook-South  
 UPN: 7641000  
 Work Type: 183-Resurfacing-Seal & Cover

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on **12/16/11**. 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:**

- |   |  |
|---|--|
| 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                            |
| Roy Peterson, 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:**

- Dawn Stratton, Fiscal Programming Section
- Robert Snyder, Road Design Area Engineer
- Damian Krings, Road Design Engineer
- County Commissioners, Blaine County, 420 Ohio, P.O. Box 278, Chinook, MT 59523-0278
- William P. Oehmcke, Mayor of Chinook, 300 Ohio St., P.O. Box 1177, Chinook, MT 59523

**e-copies:**

- |   |   |
|---|---|
| Jim Walther, Engineering, Preconstruction Engineer      | Jake Goettle, Construction Bureau – VA Engineer   |
| Lesly Tribelhorn, Highways Design Engineer              | Steve Prinzing, District Preconstruction Engineer |
| Mark Goodman, Hydraulics Engineer                       | Christie McOmer, District Projects Engineer       |
| Kurt Marcoux, District Hydraulics Engineer              | Stan Kuntz, G.F. District Materials Lab           |
| Bonnie Gundrum, Env. Resources Section Supervisor       | Matt Ladenburg, Havre Maintenance Chief           |
| Paul Sturm, District Biologist                          | Jerilee Weibel, District R/W Supervisor           |
| Eric Thunstrom, Project Development Engineer            | Phillip Inman, Utilities Engineering Manager      |
| Danielle Bolan, Traffic Engineer                        | David Hoerning, R/W Engineering Manager           |
| Ivan Ulberg, G.F. District Traffic Project Engineer     | Greg Pizzini, Acquisition Manager                 |
| Kraig McLeod, Safety Engineer                           | Joe Zody, R/W Access Management Section Manager   |
| Stephanie Brandenberger, Bridge Area Eng, G.F. District | Paul Johnson, Project Analysis Bureau             |
| Matt Strizich, Materials Engineer                       | Sue Sillick, Research Section Supervisor          |
| Daniel Hill, Pavement Analysis Engineer                 | Wayne Noem, Secondary Roads Engineer              |
| Lee Grosch, District Geotechnical Manager               | Alyce Fisher, Fiscal Programming                  |
| Bryce Larsen, Supervisor, Photogrammetry & Survey       | Doug Wilmot, G.F. District Construction Engineer  |
| Marty Beatty, Engineering Information Services          | Dennis Ghekiere, District Utility Agent           |

Paul Grant, Public Involvement Officer  
Jean Riley, Planner  
Dawn Stratton, Fiscal Programming  
Scott Bunton, Engineering Cost Analyst

Linda Cline, District R/W Design  
James Combs, District Traffic Engineer



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.   
District Projects Engineer

Date: December 14, 2011

Subject: STPS 240-1(7)0  
Chinook-South  
UPN: 7641000  
Work Type: 183-Resurfacing-Seal & Cover

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

Approved Lesly Tribelhorn for Date 12/15/11  
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  
Master file  
County Commissioners, Blaine County, 420 Ohio, P.O. Box 278, Chinook, MT 59523-0278  
William P. Oehmcke, Mayor of Chinook, 300 Ohio St., P.O. Box 1177, Chinook, MT 59523

# Preliminary Field Review/Scope of Work Report

## **Introduction**

This report was developed from information taken from the preliminary field review conducted on December 1, 2011 with the following personnel in attendance:

Steve Prinzing	District Preconstruction Engineer	Great Falls
Christie McOmber	District Projects Engineer	Great Falls
Jeania Cereck	District Design Supervisor	Great Falls
Matt Ladenburg	Havre Maintenance Chief	Havre

## **Proposed Scope of Work**

This project was nominated as a preventative maintenance crack seal, seal and cover. Guardrail will be added at the Milk River Bridge at RP 1.5 along with updated bridge rail. The intent of this project is to extend the life of the pavement and provide additional skid resistance.

The plans for the proposed project will be in Reference Posts. The project begins at RP 0.0± and continues south approximately 6.8 miles to RP 6.8±.

## **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 Blaine County on S-240 beginning at RP 0.0±, Sec. 27, T33N, R19E, at the junction with N-1 (US-2) and Cleveland Road, and continues south approximately 6.8 miles ending at RP 6.8±, Sec. 25, T32N, R19E. This project traverses through the Chinook City Limits between RP's 0.0 and RP 1.1.

The Functional Classification of S-240 is a Major Collector. The project between RP's 0.0 and RP 1.1 will be designed to the Geometric Design Criteria for Urban Collector Streets (Non-NHS). The remainder of the project will be designed to the Geometric Design Criteria for Rural Collector Roads (Secondary System).

The plans for the project will be designed in route posts. The route post for this project increases north to south.

The project crosses two bridges; the first at RP 1.5 over the Milk River and the second at RP 2.9 over Three Mile Creek.

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

As-Builts according to the Road Log:

<b>Project ID</b>	<b>RP</b>	<b>RP</b>	<b>Year Built</b>	
S-311(2)	0.000	1.107	1954	
S-311(5)	1.107	1.993	1964	

## Preliminary Field Review/Scope of Work Report

STPS 240-1(7)0 Chinook-South  
Project Manager : Christie W. McOmber, PE

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S-311(2)	1.993	6.847	1954	
S-340(8)	6.847	11.221	1965	
RTS 240-1(3)	1.107	11.158	1997	improved

### Adjacent Projects:

BR 240-1(5)3 3 Mile CR-2M S Chinook is a bridge replacement project at RP 2.9 and has an anticipated letting date of June 2013. Approximate project limits are between RP 2.779 and 3.022. The limits of this project will receive crack seal and a seal and cover.

### 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) guidance. The plans package will include a limited 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 terrain surrounded mainly by ranching and farm land with the exception that it also passes through the town of Chinook for the first 1.1 miles.

The project was originally constructed at 24.0' wide finish top incorporating 8" comp. base course (RP 1.6 to RP 2.4 and RP 3.8 to RP 5.2) with 5" top course in 2 lifts or 12" comp. base course (RP 0.0 to RP 1.6 and RP 2.4 to RP 3.8 and RP 5.2 to 6.8) with 5" top course in 2 lifts. The roadway finish top width varies between 23' and 30' wide.

The roadway was improved with a 2" overlay in 1997 between RP 1.107 and 11.221. The roadway finish top width from field observation varies between 25' and 27' wide average.

The PvMS Data shows a ride of 75.2 (fair); Rut 63.9 (good); ACI of 97.6 (good); and MCI 75.5 (fair) with a recommendation for Crack Seal and Cover in 2011 and Thin Overlay in 2013.

### Traffic Data

Traffic data is not required for this seal and cover project.

### Crash Analysis

A crash analysis is not required for this seal and cover project.

### Major Design Features

- a. **Design Speed.** The design speed for Urban Collector Streets (Non-NHS) is 30 mph. The posted speed limit is 25 mph. The design speed for Rural Collector Roads is 50 mph for rolling terrain. The posted speed limit is 45 mph escalating to 70 mph/65 mph trucks and reducing to 35 mph in/out of the 3 Mile Creek Bridge.
- b. **Horizontal Alignment.** The horizontal alignments will be perpetuated with this pavement preservation project. The radii of the five horizontal curves within the urban area of Chinook vary between 2,865' and 150.8'; four of the five curves are below the minimum radii of 371' as stated in the Geometric Design Criteria for Urban Collector Streets with a 30 mph design speed. The radii in the rural portion vary between 3820' and 573'; one of the curves is below the minimum radii of 760' as stated in the Geometric

## Preliminary Field Review/Scope of Work Report

- Design Criteria for Rural Collector road with a 50 mph design speed.
- c. **Vertical Alignment.** The vertical alignments will be perpetuated with this pavement preservation project. The grades vary between 0.00% and 0.77% in the urban area and do not exceed the maximum grade of 10.00% allowed for Urban Collector Streets with a 30 mph design speed. The grades in the rural area vary between 0.00% and 6.00% and do not exceed the maximum grade of 7.00% allowed for Rural Collector Roads with a 50 mph design speed.
  - 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 and cover. Per as-built data and the road log the majority of the roadway varies between 23' and 30', but field measurements during the PFR review revealed roadway usable width between 25.0' and 27.0' average.
  - e. **Geotechnical Considerations.** No Geotechnical issues will be addressed with this project.
  - f. **Hydraulics.** No hydraulic issues will be addressed with this project. Three large culverts are located within the project limits.
    - RP 3.46, 4.0' x 158' CMP
    - RP 5.42, 3.0' x 78' CMP
    - RP 6.79, 3.0' x 64' CMP
  - g. **Bridges.** The project crosses two bridges;
    - 1. At RP 1.5 over the Milk River is a 30' x 214' concrete structure with bituminous surfacing. The deck roadway width between the curbs is 28' wide. This structure will receive update bridge rail, new guardrail on the advancement and departure ends and will receive a seal and cover.
    - 2. At RP 2.9 over Three Mile Creek is a 25' x 41' timber structure with bituminous surfacing. The deck roadway width between the rails is 24' wide. This structure is anticipated to be replaced in 2013. This structure will receive a seal and cover.
  - h. **Traffic.** New pavement markings will be required. The lane width striping is painted wide and will be placed to the standard 12.0' widths. The four object markers (OM-3's) located on the Milk River Bridge at RP 1.5 will be removed to install guardrail.
  - i. **Pedestrian/Bicycle/ADA.** No pedestrian/bicycle/ADA improvements are needed for this project. No sidewalks exist on this route.
  - j. **Miscellaneous Features.** Guardrail will be installed at the advancement and departure ends of the structure at RP 1.5 over the Milk River and the bridge rail will be updated.
  - k. **Context Sensitive Design Issues.** There are no Context Sensitive Design issues on this project.

### Other Projects

BR 240-1(5)3 ~ 3 Mile CR-2M S Chinook is a bridge replacement project at RP 2.9 and has an anticipated letting date of June 2013. Approximate project limits are between RP 2.779 and 3.022. The limits of this project will receive crack seal and a seal and cover.

### Location Hydraulics Study Report

No LHSR will be required this project.

### Design Exceptions

In the Urban portion of the project four of the five curves are below the minimum radii of 371' as stated in the Geometric Design Criteria for Urban Collector Streets with a 30 mph design speed. One of the curves in the rural portion is below the minimum radii of 760' as stated in the

## Preliminary Field Review/Scope of Work Report

Geometric Design Criteria for Rural Collector Road with a 50 mph design speed. This radius is at the junction with the urban route and rural route. Due to the nomination as a pavement preservation project, the substandard radii will not be addressed.

### **Right-of-Way**

There is no right-of-way involvement for this project. Right of Way limits vary between 30' and 60' in the urban portion and 50' and 190' in the rural portion.

### **Access Control**

Access control will not be required for this project.

### **Utilities/Railroads**

There will be no railroad or utility involvement with this project. Some known utilities in the vicinity are overhead power and underground gas. A note to locate underground utilities before placement of guardrail will be included in the plans.

### **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. The plans package will include a limited Transportation Management Plan (TMP) consisting mainly of a Traffic Control Plan (TCP).

### **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 Field Review/Scope of Work Report

STPS 240-1(7)0 Chinook-South  
 Project Manager : Christie W. McOmer, PE

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### Preliminary Cost Estimate

The estimated cost that has been programmed to construct this project without IDC is \$628,000. However, the preliminary construction engineering estimate including CN, CE, IDC, crack seal, seal, cover, guardrail, bridge rail, pavement markings and traffic control is \$530,896. The cost per mile is approximately \$64,735.

Project Name		Estimate	Inflation (INF)	w/INF + IDC
		Costs	(from PPMS)	(from PPMS)
Road work		\$348,800		
Traffic Control		\$15,000		
<b>Subtotal</b>		<b>\$363,800</b>		
Mobilization	10%	\$36,380		
<b>Subtotal</b>		<b>\$400,180</b>		
Contingencies	10%	\$40,018		
<b>Total CN</b>		<b>\$440,198</b>	<b>\$4,192</b>	<b>\$487,229</b>
<b>CE</b>	<b>10%</b>	<b>\$44,020</b>	<b>\$419</b>	<b>\$48,723</b>
IDC: 9.64%			<b>TOTAL</b>	<b>\$535,952</b>
<b>Inflation Factor (ppms)</b>			<i>0.009522066</i>	

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 9.64% as of FY 2012.

### Ready Date

The target ready date for this this project is **January 26, 2012** with a letting date in April 2012.

### Site Map

The project site map is attached.

# Preliminary Field Review/Scope of Work Report

STPS 240-1(7)0 Chinook-South  
Project Manager : Christie W. McOmer, PE

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## MONTANA DEPARTMENT OF TRANSPORTATION

### FEDERAL AID PROJECT STPS 240-1(7)0 CRACK SEAL, SEAL & COVER CHINOOK - SOUTH BLAINE COUNTY

LENGTH 6.8 miles  
NO SCALE

