



2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Brian Hasselbach
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59601-9785

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Project
Main St. – Woody to Jefferson
UPP 8108(1)
Control Number: 7432 000

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 Checklist. We will supply any environmental-related Special Provisions to the Contract Plans Bureau for inclusion in the project plans.

If you have questions or concerns, please contact Susan Kilcrease at (406)523-5842. She will be pleased to assist you.

Sincerely,

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

Attachments: PFR/SOW Report, Environmental Checklist

copies: w/signed checklist:	Paul Ferry, P.E.	Highway Engineer
	Ben Nunnallee	Project Design Manager
	Dan Ham	Missoula District Envir. Engineering Specialist
	Susan Kilcrease	Missoula District Project Development Engineer
	Montana Legislative Branch	Environmental Quality Council (and w/PFR/SOW)
	Environmental Services File	

copies:	Doug Moeller	Missoula District Administrator
	Tom Martin, P.E.	Environmental Services Bureau Chief
	Kevin Christensen, P.E.	Construction Engineer
	Suzy Price	Contract Plans Bureau Chief
	Dawn Stratton	MDT Fiscal Programming Section Supervisor-acting
	Gene Kaufman, P.E.	FHWA Operations Engineer

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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: UPP 8108(1) Control No.: 7432000 Project Name: Main St. - Woody to Jefferson

Reference Post (Station): 0.07 To Reference Post (Station): 0.56

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

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

Type of Proposed Pavement Preservation Activity: Work Type 160 - Minor Rehabilitation

Table with 3 columns: Impact Questions, Yes, No, Comment. Contains 14 rows of questions regarding environmental impacts like Wild or Scenic Rivers, species, water quality, wetlands, etc.

Checklist prepared by:

Ben Nunnallee, P.E.

Applicant

Project Design Engineer

Title

6/6/2011

Date

Approved by:

Handwritten signature of Ben Nunnallee

Environmental Services

ENVIRONMENTAL ENGINEERING

SECTION SUPERVISOR

Click here to enter text.

Title

JUN 15 2011

Click here to enter a date.

Date

Project Number: UPP 8108(1) Control No.: 7432000 Project Name: Main St. – Woody to Jefferson
(When any of the above questions are checked "Yes")

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.



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

MASTER FILE
COPY

Memorandum

To: Paul Ferry, P.E.
Highways Engineer

From: Shane Stack, P.E.
Missoula District Preconstruction Engineer

Date: June 7, 2011

Subject: UPP 8108(1)
Main St. – Woody to Jefferson
UPN 7432000
Work Type 160 – Minor Rehabilitation

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

Approved  Date June 7, 2011
for 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

Preliminary Field Review/Scope of Work Report

UPN 7432000, UPP 8108(1), Main St. – Woody to Jefferson
Project Manager: Ben Nunnallee, P.E.

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Introduction

An onsite field review was held on April 5, 2011. The following people attended:

Sandy Dorsett – Missoula District Design Supervisor
Steve McEvoy – MDT Surfacing Design
Doug Harby – Missoula City Public Works Department
Scot Wohlin – Missoula District Road Design

A separate onsite field review was held on June 6, 2011 by Ben Nunnallee – Missoula District Projects Engineer.

Proposed Scope of Work

The proposed project has been nominated to preserve the asphalt pavement and to extend the service life of the roadway. A 0.20 ft mill, 0.20 ft plant mix overlay, and a seal & cover are proposed for this project. The block between Higgins Ave. and Pattee St. will only receive a seal & cover treatment as it was resurfaced by the City last year. New concrete sidewalk ramps will be constructed at various locations and truncated domes will be added in various locations in order to bring the intersections into ADA compliance. One area of degraded surfacing in the vicinity of Ryman and Main Street will be rehabilitated by City Street Maintenance prior to the construction of this project. Replacement of the signing and pavement markings will also be included.

Purpose and Need

The purpose of this project is to preserve the existing pavement to extend the service life of the existing asphalt surfacing. This section of highway is due for pavement resurfacing before the deterioration of the pavement begins to accelerate.

Project Location and Limits

This project is located in Missoula County, beginning at the Main Street and Woody Street intersection on U-8108 (Main Street). The project begins at Reference Post (RP) 0.07±. The project extends easterly 0.49 miles to RP 0.56±. This segment of road is located in Township 13 N, Range 19 W (Section 22).

U-8108 is functionally classified as a Collector – Urban. See the attached location map.

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 Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address public notification will also be included. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

The existing terrain within the project limits is level in an urban setting. There are numerous private and public approaches as well as on-street parking for commercial businesses, churches, and the main library on this roadway in the heart of downtown Missoula.

The roadway was constructed and has been maintained by the City of Missoula. It is unknown when this roadway was originally built and no as-built plans are available. The TIS Road Log indicates the following existing roadway information:

Reference Posts	Improvement Project ID	Total Width	Lanes	Surf. Depth	Base Depth	Left	Right
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Preliminary Field Review/Scope of Work Report

UPN 7432000, UPP 8108(1), Main St. – Woody to Jefferson

Project Manager: Ben Nunnallee, P.E.

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RP 0.000 to 0.503 Bow St. to Pattee St.	City Construction	65'	2-12'	3"	6"	Curb & Sidewalk	Curb & Sidewalk
RP 0.503 to 0.562 Pattee St. to Jefferson St.	City Construction	30'	2-12'	3"	6"	Curb & Sidewalk	Curb & Sidewalk

The rest of the pavement width not used for the travel lanes is used for on-street parking.

Surfacing depths determined from core samples taken in March, 2011 by the MDT Missoula District Materials Lab in Missoula indicate the existing asphalt thicknesses from RP 0.1 to RP 0.6 range from 0.45 ft to 0.62 ft. The samples have been sent to Helena for stripping analysis.

There is one bearing change with no horizontal curve on the project. This bearing change is approximately 16 degrees and occurs at the Washington Street intersection. The rest of the project is essentially straight with no horizontal curves or noticeable changes in direction. No superelevation exists on the project. The existing typical appears to have a normal crown throughout. Using the Low-Speed Urban Streets design criteria for the posted speed limits, the normal crown geometry would be acceptable.

There are no detectable vertical curves on this project. The route is level, based on physical observation.

The Pavement Management System does not have a pavement condition and treatment recommendation for these sections of road because these Urban routes are not profiled and therefore not documented. The City of Missoula gave Pavement Condition Indices (PCI) for this stretch of road varying from 65 – 82 (on a 0 – 100 scale) in 2010 before the deterioration of the roadway this last winter and the rehabilitation work that they did this past spring. According to the City's Treatment Strategies, the PCI range of 60 – 79 indicates that this stretch of roadway requires an overlay. The street is generally structurally sound but the existing asphalt is worn out. It will usually require some sectioning of bad areas, drainage improvements, curb installation, and ADA upgrades. The two blocks from Pattee St. to Adams St. are ranked at 82 which is at the low end of the Maintenance Required pavement strategy (may require patching, sectioning, chip seal, reclaimite, crack sealing, some drainage improvements, or thin overlays). However, upon visual inspection during the field review these blocks should receive the same mill/fill pavement treatment as the rest of the project. The block between Higgins Ave. and Pattee St. ranked at 100 meaning no work required. However, the recent resurfacing of this block by the City did not include a chip seal. Therefore, it will receive a chip seal with this project.

Traffic Data

2011 AADT = 4,660 (Present)
 2011 AADT = 4,660 (Letting Year)
 2031 AADT = 5,680 (Design Year)
 DHV = 620
 Com Trucks = 1.9%
 Growth Rate = 1.0% (Annual)
 ESAL's = 24

Crash Analysis

Safety Management completed a crash analysis for the five-year period from 07/01/05 through 6/30/10 for the segment RP 0.10 to RP 0.60:

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Project Manager: Ben Nunnallee, P.E.

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Total Recorded Crashes:	62
Fatal Injury Crashes:	0
Incapacitating Injury Crashes:	2
Non-Incap. and Other Injury Crashes:	11
Property Damage Only Crashes:	49

The crash rate was 18.40 as opposed to a statewide average of 5.06, the severity index was 1.58 as opposed to a statewide average of 1.67, and the severity rate was 29.08 as opposed to a statewide average of 8.48.

One variation from the average occurrence on N-P routes through urban areas was identified:

- 27.4% occurred during dark-lit conditions vs. 15.2% statewide average for city streets.

The main crash trend identified is intersection or intersection related crashes. Thirty-nine of the 62 reported crashes were cited as occurring in or related to an intersection. A secondary crash trend is collisions with a parked motor vehicle (17 crashes). Of the 62 crashes, 14 cited rear end collision, 19 cited right angle collision, 11 cited sideswipe same direction collision, 10 cited parked motor vehicles as being the first or most harmful event, 17 cited failed to yield as a contributing circumstance, and 2 crashes involved collisions with a bicycle. Five of the reported crashes cited pedestrian as the first or most harmful event. However, after reviewing the crash reports, a total of seven crashes were related to vehicles stopping for pedestrians in marked crosswalks within the study area and being rear-ended by vehicles.

Traffic and Safety did not make any suggestions for safety improvements to this section of roadway.

Major Design Features

This project will be developed in accordance with the latest Guidelines for Nomination and Development of Pavement Projects. The plans will be developed in English units.

- Design Speed.** The geometric design criteria for Urban Collector Streets with curbs indicate that the design speed should be 30 mph. The posted speed limit is 25 mph throughout the project length. Design speed is not an applicable design criterion for preventative maintenance projects.
- Horizontal Alignment.** The existing horizontal alignment will not be changed with this pavement resurfacing preventative maintenance project.
- Vertical Alignment.** The existing vertical alignment will not be changed with this pavement resurfacing preventative maintenance project.
- Typical Sections and Surfacing.** The current typical section widths will remain unchanged. The full width of the roadway (including the parking lanes) will receive a 0.20' mill and 0.20' overlay (Commercial Grade PG Binder 64-28) followed by a chip seal (Cover Type 2 and CRS-2P seal oil). The block between Higgins Ave. and Pattee St. will only receive a seal & cover treatment.
- Geotechnical Considerations.** There are no geotechnical considerations for this resurfacing project. The existing roadside slopes will not be disturbed and there are no grading considerations.
- Hydraulics.** There are no hydraulics considerations for this pavement resurfacing preventative maintenance project.
- Bridges.** There are no bridges on this segment of U-8108.
- Traffic.** The existing pavement marking layout will be used to re-stripe the roadway. Traffic Engineering will provide the quantities, details, and specifications for interim

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paint and final epoxy. These items will be included in the road plans package. Traffic Engineering will also provide the necessary plans, quantities, details, and specifications for replacing the existing signing.

- i. **Pedestrian/Bicycle/ADA.** There are existing sidewalks on the LT and RT sides of Main Street. At all intersections (except for two intersection corners), the sidewalks have ADA ramps at the corners. Existing curb ramps that do not have landings will be upgraded to meet current ADA standards. ADA ramps will be added to the two corners that do not have them. Truncated domes will be added to all ADA ramps (existing and proposed). There are no bicycle lanes on this stretch of roadway. Due to the nature of this preventative maintenance project, no new accommodations, other than the ADA upgrades previously listed, will be added.
- j. **Miscellaneous Features.**
There are no additional features beyond what has already been covered.
- k. **Context Sensitive Design Issues.** There are no special context sensitive design issues identified for this pavement resurfacing preventative maintenance project.

Other Projects

This project will probably be tied with three other Missoula Urban Pavement Preservation projects that are also scheduled for construction in 2012:

UPN 7430000, Clements Rd. & 3rd St.,
UPN 7431000, South Ave. – Bow to S. Higgins, and
UPN 7672000, Arthur Ave. – S. Ave. to Beckwith

Location Hydraulics Study Report

A Location Hydraulics Study Report will not be needed for this project.

Design Exceptions

The design exception process does not apply to pavement preservation projects.

Right-of-Way

There will be no right-of-way involvement on this project.

Cold-In-Place Recycle

This project is not a good candidate for Cold-In-Place Recycling due to the stop-and-go traffic and short length of the mill/fill section and resultant high cost of mobilization for this process.

Access Control

This section of roadway is not an access control facility.

Utilities/Railroads

Utilities – There will be no utility involvement on this project. Existing manholes, water valves, and storm drains within the roadway will be protected so that they will not be impacted by the pavement resurfacing.

Railroads – There will be no railroad involvement on this project.

Intelligent Transportation Systems (ITS) Features

Implementation of ITS solutions will not be included with this project

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Survey

A topographic survey has been requested to obtain sufficient information to design the ADA curb ramp upgrades, signing and pavement markings, and to determine roadway quantities.

Public Involvement

A Level A public involvement plan is appropriate for this project. A News Release explaining the project and including a department point of contact will be distributed to the local media.

Environmental Considerations

No significant environmental impacts or issues were identified. We reviewed the project and determined it meets the criteria for the Programmatic Agreement as a Categorical Exclusion under the provisions of 23 CFR 771.117(d) as signed by MDT on February 18, 2005 and concurred by FHWA on March 4, 2005. The Environmental Checklist for Pavement Preservation Projects has been submitted separately.

Energy Savings/Eco-Friendly Considerations

The cold millings from this project will be taken by MDT Maintenance for reuse on future projects.

Experimental Features

There are no experimental features identified for this pavement resurfacing preventative maintenance project.

Traffic Control

Traffic will be maintained through the construction of the project with appropriate signing, flagging, pilot cars, etc., in accordance with the Manual on Uniform Traffic Control Devices. The work zone will require single lane closures during construction operations. A minimum of one lane will remain open for traffic at all times during the construction of this project. Possible stipulations governing the time of year, the days of the week during which construction activities may take place, time of day, and maximum length of roadway that may be under construction at a time may be specified in the contract in order to minimize public impact. Most likely, this project will require night work due to the numerous businesses along the route and in order to repave the parking lanes.

A Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP) is appropriate for this project. Due to the relatively simple nature of the work, the TCP will consist of only special provisions.

Project Management

The Missoula District Design Crew will be responsible for developing the plans. Ben Nunnallee will manage the design of this project. See contact information below:

Ben Nunnallee, P.E.
Montana Department of Transportation
2100 West Broadway, PO Box 7039
Missoula, MT 59807-7039
(406) 523-5846
e-mail: bnunnallee@mt.gov

This project is not under full FHWA oversight.

Preliminary Field Review/Scope of Work Report

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Project Manager: Ben Nunnallee, P.E.

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Preliminary Cost Estimate

The nomination cost estimate (without IDC) that was originally programmed for this project was \$374,000 (CN = \$340,000 and CE = \$34,000). The total nomination cost estimate including IDC was \$423,929.

Current Cost Estimate:

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$310,000		
Traffic Control	\$15,000		
Subtotal	\$325,000		
Mobilization (10%)	\$33,000		
Subtotal	\$358,000		
Contingencies (10%)	\$36,000		
Total CN	\$394,000	\$70,544	\$526,560
CE (10%)	\$39,000	\$6,982	\$52,120
TOTAL CN+CE	\$433,000	\$77,526	\$578,680

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. Currently, a Letting Date has not been established in PPMS.

Ready Date

This project has a Ready Date of December 1, 2011. The Letting Date has not yet been established but it will be let for construction in 2012. The project is currently about 1.5 months ahead of schedule in OPX2.

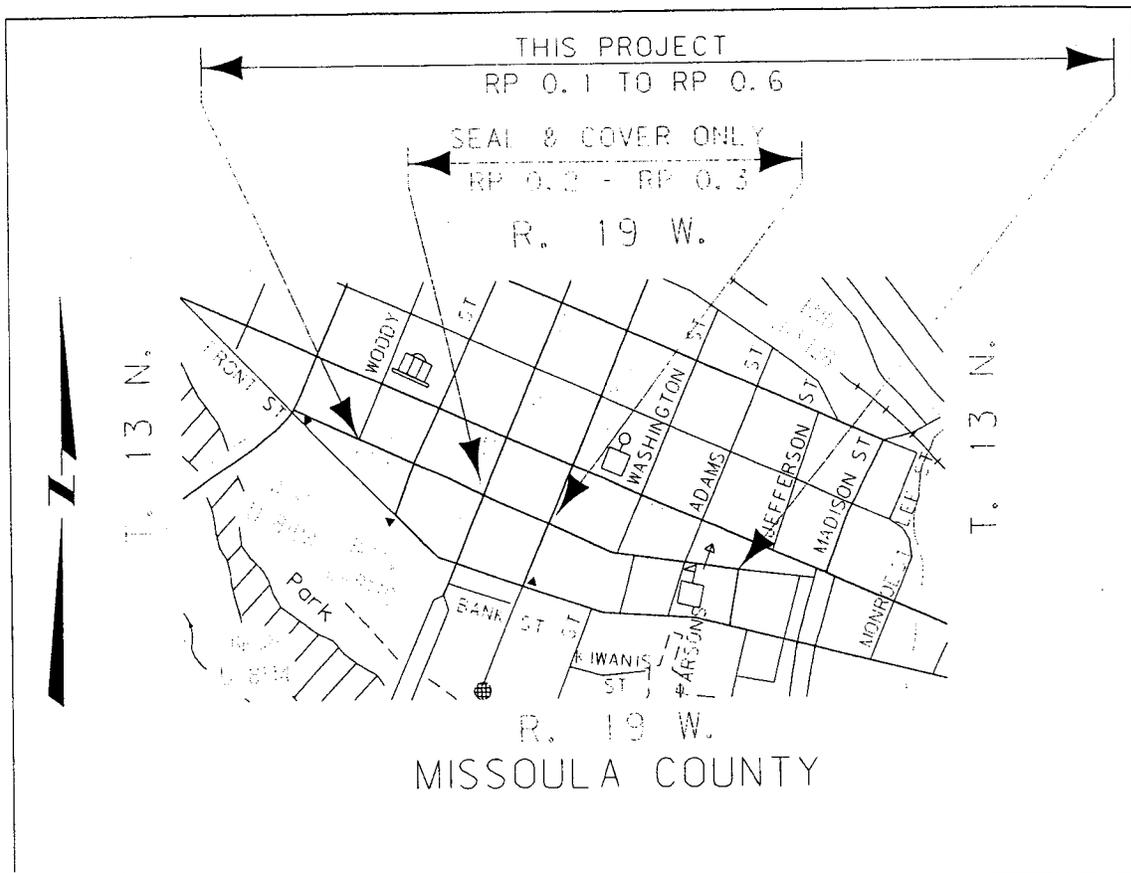
Site Map

The project site map follows.

Preliminary Field Review/Scope of Work Report

UPN 7432000, UPP 8108(1), Main St. - Woody to Jefferson

Project Manager: Ben Nunnallee, P.E.



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