



July 20, 2012

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  
UPP 5805(14)  
Park Ave-Broadway to Neill-Hlna  
Control Number: 7722000

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,

Heidy 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
Heidy Bruner, P.E.	Environmental Services Bureau Engineering Section Supervisor
Eric Thunstrom	Environmental Services Bureau Project Development Engineer
Paul Ferry, P.E.	Highways Engineer
Robert Snyder, P.E.	Road Design Area Engineer
Kevin Christensen, P.E.	Construction Engineer
Suzy Price	Contract Plans Bureau Chief
Nicole Pallister	Fiscal Programming Section Supervisor
Tom Erving	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 Number: UPP 5805(15) Control No 7722000 Project Name: Park Ave - Brdwy to Neill-Hlna

Reference Post (Station): 1.578 To Reference Post (Station): 2.047

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

Type of Proposed Pavement Preservation Activity: Resurfacing - Asphalt (thin lift <=0.20')(including Safety Improvements)

Table with 3 columns: Impact Questions, [Y/N] There are Potential Impacts; or Item Requires Documentation, Evaluation, Mitigation Measures, and/or (a) Permit(s), and Comment (Use attachments if necessary). Rows include questions about Wild or Scenic Rivers, species, water quality, MS4 Permit Areas, wetlands, and air quality.

MASTER FILE COPY

Checklist prepared by:

Robert Snyder, P.E.

Applicant

Project Design Engineer

ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR

4/5/2012

Date

Approved by: [Signature]

Environmental Services

Title

1/24/12 Click here to enter a date.

Date

(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

**Memorandum**

To: Distribution

From: Paul Ferry, P.E.  
 Highways Engineer

Date: 4/9/12

Subject: UPP 5805(15)  
 Park Ave – Brdwy to Neill - Hlna  
 UPN 7722000  
 Resurfacing – Asphalt (thin lift  $\leq 0.20'$ )(including Safety Improvements)

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:**

Mick Johnson 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

**cc:**

Dawn Stratton, Fiscal Programming Section  
 Damian Krings, Road Design Engineer (if involved)  
 RJ Snyder, GF Road Design - Helena

Ben Sautter, Street Superintendent  
 316 N. Park Ave  
 Helena, MT 59624

Ryan Leland, City Engineer  
 316 N. Park Ave  
 Helena, MT 59624



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

**Memorandum**

To: Paul Ferry, P.E.  
 Highways Engineer

From: Damian Krings, P.E.  
 Road Design Engineer

Date: 4/9/12

Subject: UPP 5805(15)  
 Park Ave – Brdwy to Neill - Hlna  
 UPN 7722000  
 Resurfacing – Asphalt (thin lift  $\leq 0.20'$ )(including Safety Improvements)

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

Approved \_\_\_\_\_ Date \_\_\_\_\_  
 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

**e-copies:**

- |   |   |
|---|---|
| Jim Walther, Engineering, Preconstruction Engineer    | Steve Prinzing, District Preconstruction                      |
| Lesly Tribelhorn, Highways Design Engineer            | Christie McOmber, District Projects Engineer                  |
| Mark Goodman, Hydraulics Engineer                     | Stanley Kuntz, District Materials Lab                         |
| Kurt Marcoux, District Hydraulics Engineer            | Tony Strainer, District Maintenance Chief                     |
| Bonnie Gundrum, Env. Resources Section Supervisor     | Jerilee Weibel, District Right of Way Supervisor              |
| Paul Sturm, District Biologist                        | Phillip Inman, Utilities Engineering Manager                  |
| Eric Thunstrom, District Project Development Engineer | David Hoerning, R/W Engineering Manager                       |
| Danielle Bolan, Traffic Engineer                      | Greg Pizzini, Acquisition Manager                             |
| Ivan Ulberg, District Traffic Project Engineer        | Joe Zody, R/W Access Management Section Manager               |
| Kraig McLeod, Safety Engineer                         | Paul Johnson, Project Analysis Bureau                         |
| S. Brandenberger, Bridge Area Engineer, GF District   | Sue Sillick, Research Section Supervisor                      |
| Daniel Hill, Pavement Analysis Engineer               | Duane Williams, Motor Carrier Services Division Administrator |
| Lee Grosch, District Geotechnical Manager             | Alice Flesch, ADA Coordinator                                 |
| Bryce Larsen, Supervisor, Photogrammetry & Survey     | Mark Keeffe, Bicycle/Pedestrian Coordinator                   |
| Marty Beatty, Engineering Information Services        |   |
| Paul Grant, Public Involvement Officer                |   |
| Jean Riley, Planner                                   |   |
| Scott Bunton, Engineering Cost Analyst                |   |

## Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

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### **Introduction**

This report was developed from information taken from the preliminary field review conducted on November 29, 2011 with the following in attendance:

Steve Prinzing	Great Falls District Engineering Services Supervisor
Jimmy Combs	Great Falls District Traffic Engineer
Dan Hill	Pavement Analysis Engineer - Supervisor
Steve McEvoy	Pavement Analysis Engineer
Jim Hansen	Urban Design - Designer
Jim Cornell	Traffic Signing
Charles Pierce	Urban Design – Design Supervisor
RJ Snyder	Great Falls District Project Design Manager
Ryan Leland	City Engineer – City of Helena
Eric Thunstrom	Great Falls District Environmental Project Development Engineer

### **Proposed Scope of Work**

The proposed project has been nominated for a preventative maintenance thin lift overlay. The proposed work includes new asphalt surfacing, cold milling, new pavement markings and update signs. ADA features within existing sidewalks will also be addressed to meet PROWAG standards and drainage issues that arise from these improvements will be addressed as well.

### **Purpose and Need**

The intent of the project is to extend the life of the roadway by full width milling and filling the roadway with 0.15' feet of 3/8" Grade S plant mix bituminous surfacing.

### **Project Location and Limits**

- a. The project is located in Lewis and Clark County.
- b. The project is located within the city limits of Helena (in the Helena Urban Boundary) in Lewis and Clark County on Urban Route 5805 beginning south of the intersection with Broadway Street (RP 1.578±) and extending north to just south of the intersection with Neill Ave (RP 2.047).
- c. The functional classification of U-5805 is an urban minor arterial and the project will be designed to the geometric design criteria of a curbed, multi-lane roadway.
- d. The project length is 0.469 mile.
- e. This project lies in Township 10 North, Range 3 West, Sections 30 and 31,
- f. We were unable to find As-Builts from Lawrence St. to Broadway St. There are As-Builts for the section from Neill Ave to Lawrence, FAS US 246(1).

### **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 mainly of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address lane closures and wide load detours will also be included in the plan package. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

### **Physical Characteristics**

- a. This project is located on rolling terrain within an urban area. The adjacent land is used for both commercial and residential property.

## Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

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- b. South Park Ave begins as a 3 lane facility with parking on both sides ( $\approx 790$  ft). This lane configuration is perpetuated north into the intersection of Park Avenue and Clarke Avenue. The center lane and parking are terminated north of the Park/Clarke intersection into the intersection of W. 6<sup>th</sup> Ave ( $\approx 180$  ft). North of the W. 6<sup>th</sup> Ave/Park Ave intersection, Park Avenue returns to a 3 lane section with restricted parking on the eastside into the intersection of Lawrence Avenue ( $\approx 270$  ft). North of Lawrence Avenue, Park Avenue becomes a 2 lane section with parking on both sides until the end of the project ( $\approx 1260$  ft).
- c. It is unknown when original roadway construction was completed, but it was surfaced with bituminous asphalt under project US 246(1) in 1959. The roadway surfacing has been upgraded by the City of Helena in the past. It is unknown when the roadway was last resurfaced.
- d. The Road Log shows an average pavement thickness of 3 inches. Asphalt cores show a thickness of 6 inches. The average base course thickness is 12 inches.
- e. Urban Route data is not obtained for inclusion in the yearly PvMS Pavement Condition and Treatment Report. This project was nominated and scoped based on City of Helena's pavement preservation plan.

### Traffic Data

The Traffic Data Collection Section provided the following traffic data:

2012 ADT	10,020 (PRESENT)
2013 ADT	10,130 (LETTING DATE)
2033 ADT	12,610 (FUTURE)
DHV	1,150
T	0.7%
ESAL	45
AGR	1.1%

### Crash Analysis

#### ENGINEERING STUDY EVALUATION

DESCRIPTION: PARK AVE – BROADWAY TO NEILL – HELENA

ROUTE & RP: U-5805 RP 1.578 TO RP 2.047

DATE TIME FRAME: 01-01-2008 TO 12-31-2010

STATEWIDE RATES NOT AVAILABLE FOR URBAN ROUTES

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#### STUDY AREA

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ALL VEHICLE CRASH RATE: 10.15<sup>1)</sup>

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ALL VEHICLES SEVERITY INDEX: 1.56<sup>2)</sup>

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ALL VEHICLE SEVERITY RATE: 15.79<sup>3)</sup>

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## Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

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TOTAL RECORDED CRASHES: 54

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- 1) Crash rates are defined as the number of crashes per million vehicle miles
- 2) Severity index is defined as the ratio of the sum of fatal and incapacitating injury crashes times 8 plus the number of other injury crashes times 3 plus the number of property damage crashes to the total number of crashes.
- 3) Severity rate is defined as the crash rate multiplied by the severity index.

### I. VARIATIONS FROM AVERAGE OCCURANCE:

- 51.9% Rear End Collisions vs. 31.2% Statewide Average for Cities
- 18.35% Head-On Collisions vs. 1.8% Statewide Average for Cities.
- 13.0% Right Angle Collisions vs. 25.2% Statewide Average for Cities.

### II. CRASH CLUSTERS OR SAFETY PROJECTS

- SF069-SIGNING-PLACER AVE-HLNA is within the project limits and is currently under design. The scope calls for the installation of two bulb-outs at the 2 southern corners of the intersection of Park Ave and Placer Ave.

### III. REMARKS & RECOMMENDATIONS:

The following is a summary of the crashes within the study area:

- 31 crashes occurred either in or were related to an intersection.
- 28 crashes in a rear end collision.
- 6 crashes resulted in a sideswipe same direction collision.
- 5 crashes involved a parked vehicle.
- 1 crash involved a pedestrian.

The following areas had more than 5 crashes:

- Intersection of Park and Lawrence (8 crashes)
- Intersection of Park and Placer (6 crashes)
- Intersection of Park and Neill (11 crashes)
- On Park between Neill and Placer (8 crashes)

The Safety Engineering Section checked reported crashes for the first 6-months of 2011. There have been 6 reported crashes. The following is a summary of those crashes:

- 5 crashes occurred either in or were related to an intersection, 2 of which were at the intersection of Park & Neill.
- 4 crashes resulted in a rear-end collision
- All crashes happened during daylight conditions.

### Major Design Features

- a. **Design Speed.** The proposed design speed for this project is 35 MPH. The posted speed limit is 25 mph throughout the project.
- b. **Geometrics.** Due to the scope of the project, the existing horizontal and vertical alignment of the roadway will remain.
- c. **Typical Sections and Surfacing.** There are no proposed changes to the typical section with this pavement preservation project. The proposed surfacing is full width 3/8" plant mix surfacing with no chip seal.

## Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

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- d. **Geotechnical Considerations.** No geotechnical issues will be addressed with this project.
- e. **Hydraulics.** No major hydraulic issues are anticipated with this project.
- f. **Bridges.** There are no bridges within the project limits.
- g. **Traffic.** New signage and striping will be included with this project.
- h. **Pedestrian/Bicycle/ADA.** ADA compliance outlined in PROWAG guidelines has been inventoried. ADA corner modifications will occur at the intersections of Clarke and 6<sup>th</sup> Ave. As survey and design are being completed it may be determined that work is necessary at additional corners.
- i. **Miscellaneous Features.** Retaining walls pertinent to the modification of ADA ramps may be constructed.
- j. **Context Sensitive Design Issues.** There are no Context Sensitive Design issues on this project.

### Other Projects

There is a safety project located within the project limits. That project is HSIP 5805(10) – SF069-Signing-Placer Ave-Hlna. The project was originally nominated as an overhead signing project. Due to encroachment onto historical property and uncertainty toward the efficacy of overhead signing as a preemptive pedestrian warning for motorists, the project scope was modified to install bulb-outs on the southern corners instead. The project is currently in preliminary design within the Great Falls Road Design unit and is intended to be tied with this project for construction. The two projects will each have separate paths during their preliminary design, but are intended to be ready at the same time.

### Design Exceptions

Design exceptions are not required for substandard design elements pertaining to preventative maintenance projects.

### Right-of-Way

No new right-of-way is needed or anticipated for this project. Construction permits may be required for new sidewalk and upgrades to ADA accessibility.

### Cold-In-Place Recycle (for mill & overlay projects only)

CIPR is not being used due to short length of the project and maneuverability issues within the project limits regarding the CIPR equipment.

### Access Control

Access control is not being implemented on this project. Existing approaches locations will be maintained. Requests for approach modifications and relocations will be evaluated based on proximity to intersections and location of adjacent approaches.

### Utilities/Railroads

No railroad involvement on this project is expected.

The manholes, drop inlets, water valves, and street monuments inside the project limits may need adjustment on an ad hoc basis. Based on the number and current condition of the manholes and water valves we will get an agreement with utilities and pay for the adjustments. A SUE I survey will be required to identify possible conflicts. A SUE II may be required depending on the outcome of the design process.

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

UPP 5805(15)

Project Manager: RJ Snyder

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### **Intelligent Transportation Systems (ITS) Features**

There are no opportunities identified at this time for ITS solutions with this project.

### **Survey**

Survey will be provided by the Survey Bureau in Helena. A survey request has already been submitted to the Survey Bureau. The survey is intended to take place in early spring of 2012.

### **Public Involvement**

A "Level B" public involvement plan is appropriate for this project. A limited PI component will be included in the project outlining strategies for public notification. The Level 'B' plan will include the following:

- News release explaining the project and included a department point of contact.
- Personal contacts with local government officials
- Personal contacts with adjacent landowners explaining final design
- Construction notification and information during construction.

### **Environmental Considerations**

No apparent significant environmental issues have been identified. It is anticipated that the project meets the criteria for the Statewide Programmatic Categorical Exclusion. This project is located in a designated MS4 area, and the project must comply with local requirements, such as Helena ordinances addressing urban storm water runoff.

The Environmental Services Bureau will secure the appropriate Environmental documentation for this project.

The Environmental Checklist is attached at the end of the report.

### **Energy Savings/Eco-Friendly Considerations**

Millings generated by the project will be recycled by the City of Helena. The contact for the city is Ben Sautter (406-447-1566).

### **Experimental Features**

There will be no experimental features used for this project.

### **Traffic Control**

The proposed traffic control plan includes limited sections of lane closures on Park Avenue during construction. Closure of the entire roadway section will be prohibited. Traffic will be maintained on at least one lane at all time with only minor delays allowed. Pedestrian traffic will be maintained at signalized intersections and designated pedestrian crosswalks with only minor delays allowed. Local Access will be maintained to the maximum extent possible to minimize impact to local residents, businesses, and traveling public. Reasonable business access will be maintained and coordinated with local businesses during construction of this project. Alternate routes and possible detour designations will be discussed as the project develops.

The possibility of constructing this project at night was discussed. However, due to the location of the project, a concern was that that night work would be an excessive disturbance to the neighborhood. Pending public sentiment or other extenuating circumstances, it is not being ruled out.

## Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

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### Project Management

The Great Falls Road Design Unit will design this project and RJ Snyder is the Project Design Engineer.

### Preliminary Cost Estimate

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$333,000		
<b>Subtotal</b>	<b>\$333,000</b>		
Mobilization (10%)	\$33,300		
<b>Subtotal</b>	<b>\$366,300</b>		
Contingencies (8%)	\$29,304		
<b>Total CN</b>	<b><u>\$395,604</u></b>	<b><u>\$11,652</u></b>	<b><u>\$ 446,515</u></b>
<b>CE (10%)</b>	<b><u>\$39,560</u></b>	<b><u>\$1,165</u></b>	<b><u>\$ 44,650</u></b>
<b>TOTAL CN+CE</b>	<b><u>\$435,161</u></b>	<b><u>\$12,817</u></b>	<b><u>\$ 491,155</u></b>

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 project has a planned finish of September 6, 2012 with a scheduled ready date of October 1, 2012. The letting date is March 25, 2013 and the project currently has 17 days of float.

# Preliminary Field Review/Scope of Work Report

UPP 5805(15)

Project Manager: RJ Snyder

## Site Map

The project site map is attached.

