



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

September 21, 2010

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



Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
NH 60-2(92)93
10th Ave S-Warden Br-18th-GF
Control Number: 6960000

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.

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

e-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
Christie McOmber, P.E.	Great Falls District Projects Engineer
Kevin Christensen, P.E.	Construction Engineer
Suzy Price	Contract Plans Bureau Chief
David Jensen	Fiscal Programming Section Supervisor
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 No.: NH 60-2(92)93 ID: UPN 6960000 Project Name: 10TH AVE S-WARDEN BR-18TH-GF

Reference Post (Station) RP 94.7 to Reference Post (Station) RP 92.9

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

Type of Proposed Pavement Preservation Activity: Work Type 182: Resurfacing - PCCP

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).		Comment or List Documentation, Evaluation, Mitigation Measure, and/or (a) Permit(s) Required for Items 1 through 7.(Use attachments if necessary)
	Yes	No	
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"/>	MASTER FILE COPY
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 September 9, 2010
Applicant Title Date

Approved by: *Christie McOmber* ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR SEP 22 2010
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 (USDol)

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. *Signed by Lesly Tribelhorn for Paul Ferry 9/10/2010*
 Highways Engineer

Date: September 10, 2010

Subject: NH 60-2(92)93
 10TH AVE S-WARDEN BR-18TH-GF
 UPN 6960000
 Work Type 182: Resurfacing – PCCP

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on 9/10/2010. 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 Chief 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 |
| Duane Williams, Traffic and Safety Engineer | Jon Swartz, Maintenance Administrator |
| Rob Stapley, Right-of-Way Bureau Chief | Alan Woodmansey, Operations Engineer (full oversight) |
| Paul Ferry, Highways Engineer | |

cc:

- | | |
|--|-------------------------------------|
| Dave Jensen, Fiscal Programming Section Supervisor | Damian Krings, Road Design Engineer |
| Dustin Rouse, Road Design Area Engineer | |
| Dave Dobbs, City of Great Falls, 2 Park Drive South, P.O. Box 5021, Great Falls, MT 59403 | |
| Jim Reardon, City of Great Falls, 2 Park Drive South, P.O. Box 5021, Great Falls, MT 59403 | |

e-copies:

- | | |
|---|---|
| Jim Walther, Preconstruction Engineer | Jason Sorenson, Engineering Cost Analyst |
| Lesly Tribelhorn, Highways Design Engineer | Jake Goettle, Construction Bureau – VA Engineer |
| Mark Goodman, Hydraulics Engineer | Walt Scott, R/W Utilities Section Supervisor |
| Kurt Marcoux, District Hydraulics Engineer | David Hoerning, R/W Engineering Manager |
| Bonnie Gundrum, Env. Res. Section Supervisor | Greg Pizzini, Acquisition Manager |
| Paul Sturm, District Biologist | Joe Zody, R/W Access Management Section Manager |
| Eric Thunstrom, G.F. District Environmental Eng. | Paul Johnson, Project Analysis Bureau Chief |
| Danielle Bolan, Traffic Engineer | Susan Sillick, Research Section Supervisor |
| Ivan Ulberg, G.F. District Traffic Project Engineer | Dave Hand, Great Falls District Maintenance Chief |
| Pierre Jomini, Safety Management Engineer | Steve Prinzing, District Preconstruction Engineer |
| Stephanie Brandenberger, Bridge Area Eng. G.F. District | Christie McOmber, District Projects Engineer |
| Mary Gayle Padmos, Pavement Engineer | Stan Kuntz, G.F. District Materials Lab |
| Dan Hill, Pavement Design Engineer | Doug Wilmot, G.F. District Construction Engineer |
| Lee Grosch, District Geotechnical Manager | Jerilee Weibel, District R/W Supervisor |
| Marty Beatty, Engineering Information Services | James Combs, District Traffic Engineer |
| Paul Grant, Public Involvement Officer | Dennis Ghekiere, District Utility Agent |
| Jean Riley, Planner | Linda Cline, District R/W Design |

Preliminary Field Review/Scope of Work Report

NH 60-2(92)93

Project Manager: Christie W. McOmber

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Introduction

This report was derived from information taken from the Preliminary Field Review conducted on April 21, 2010, with the following individuals in attendance:

Mick Johnson	District Administrator	MDT	Great Falls
Steve Prinzing	District Preconstruction Engineer	MDT	Great Falls
Christie McOmber	District Projects Engineer	MDT	Great Falls
Jeania Cereck	District Design Supervisor	MDT	Great Falls
Dave Hand	District Maintenance Chief	MDT	Great Falls
Bryce Hove	Road Designer	MDT	Great Falls
Charles Pierce	Road Design	MDT	Helena
Jim Dunbar	Road Design	MDT	Helena
Ivan Ulberg	Traffic	MDT	Helena
Dan Hill	Pavement Analysis	MDT	Helena
Steve McEvoy	Pavement Analysis	MDT	Helena
Dave Dobbs	City Engineer	City of G.F.	Great Falls
Jason Handl	City Engineer	City of G.F.	Great Falls
Jim Reardon	Public Works	City of G.F.	Great Falls

Proposed Scope of Work

The proposed project has been nominated for PCCP rehabilitation. The intent of the project is to correct existing surfacing defects in order to maintain an acceptable surface in the future. The proposed work will include:

- joint sealing in areas where existing sealant is in poor condition,
- crack sealing along longitudinal and transverse cracks,
- cross-stitching along longitudinal cracks if such working cracks are not located within the wheel path,
- half/ full panel replacement if longitudinal cracks are located within the wheel path and faulting is present,
- partial depth repair locations of spalling where damage to the panel is less than 1/3 of the panel thickness, and
- full-depth repair in locations where panel deterioration is greater than 1/3 of the panel thickness.

The existing horizontal and vertical alignments will be used throughout the project.

Purpose and Need

Transverse and longitudinal cracks as well as some corner breaks are present along this project. It is necessary to provide maintenance and crack sealing to prevent future pavement deterioration. State forces cannot complete this level of maintenance due to the lack of experience regarding Portland Concrete Cement Pavement (PCCP) and high traffic volumes and speeds along this multilane route.

Project Location and Limits

This project is located in Cascade County on US-89 and part of US-87 (N-60) beginning at RP 94.7, just east of the Warden Bridge, and proceeds east for approximately 1.4 miles to RP 92.9, at the intersection with 18th Street South. The functional classification of this route is an Urban Principal Arterial – Non Interstate.

Preliminary Field Review/Scope of Work Report

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This project is located on 10th Avenue South within the Great Falls City Limits as well as the Great Falls Urban Area.

The Missouri River, BNSF railway, and River Drive (U-5205) cross underneath this route west of the project limits. This structure (Warden Bridge) for these crossings begins at approximately RP 94.735. No work will be performed on the structure with this project.

Begin: RP 94.7, Section 14, T. 20 N., R. 3 E., 10th Ave. S, Cascade County

End: RP 92.8, Section Line of Sections 7 & 18, T. 20 N., R. 4 E., 10th Ave. S, Cascade County

Length: 1.4 miles

As-Built Project Numbers and Stationing

The following table identifies original as-built project location and year built:

Original As-Built Project ID	From		To		Year Built
	Station	RP	Station	RP	
U 388(1)*	56+66.3		65+50.0		N/A
F-BHF-RTF 60-2(5)92	56+66.3		65+50.0		1983
U 388(6)	65+50.0		74+79.8		1964
U 277(3)	75+19.8		144+21.0		1956
U 277(6)	75+19.8		144+21.0		1964
NH 60-2(33)93	56+35.80	94.630	139+27.00	92.834	2000

* Denotes as-builts that could not be located.

Adjacent Projects

Federal Aid Project ARRA-NH 60-2(73)92, 10th Ave. S. – 26th St. to 20th St. – GTF, a reconstruction project with added capacity is in the process of being reconstructed. This project starts at RP 92.8 and proceeds east along U.S. Highway 87/89 for approximately 0.5 miles ending at RP 92.2. There is a connection between 18th St. and 20th St. which will replace the existing plant mix surfacing with PCCP.

Federal Aid Project BH 5299(85), D3 Br Deck Rehab/Repair 09, is a minor deck rehabilitation project scheduled for construction in 2011, which connects at the west edge of this project.

Work Zone Safety and Mobility

At this time, Level 1 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 Transportation Operations (TO) component and a limited Public Information (PI) component to address intersection 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.

Preliminary Field Review/Scope of Work Report

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Physical Characteristics

The P.T.W. traverses level terrain in the urban area of Great Falls.

Existing Surfacing

Between 1999 and 2000 this section of 10th Avenue was reconstructed by as-built project NH 60-2(33)93:

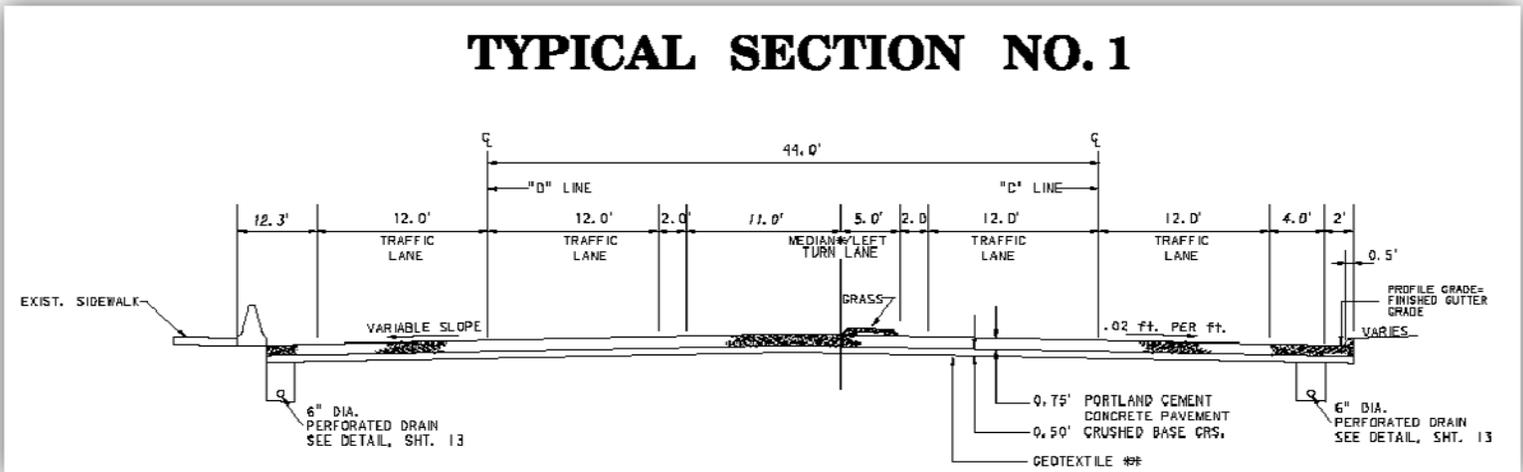
Surfacing that was placed by this project from stationing 56+35.8 (Warden Bridge) to 59+06.0 (free right turn lane onto River Drive) consists of a layer of separation & stabilization – high survivability, non-woven, min. flow rate = 4 gpm geotextile fabric, 0.50' crushed base course, and 0.75' Portland Cement Concrete Pavement (PCCP).

The remainder of this project – from station 59+06.0 (free right turn lane onto River Drive) to 131+24.5 (18th Street) – consists of a layer of separation & stabilization – high survivability, non-woven, min. flow rate = 4 gpm geotextile fabric, 0.50' crushed base course, and 0.75' Portland Cement Concrete Pavement (PCCP) with integral curbs and a 5.0' wide concrete curb median.

Typical Sections

Typical Section No. 1 – Station 56+35.8 (Warden Bridge) to 59+06.0 (free right turn lane onto River Drive):

TYPICAL SECTION NO. 1



From the left side of the typical there was existing sidewalk, a 12.3' shoulder, which includes the concrete barrier rail, followed by two 12' travel lanes, a 2' separation between the travel lane and a 16' left turn lane / median (11' wide left turn lane / 5' wide median), another 2' separation between the 16' left turn lane \ median and the travel lane, two more 12' travel lanes, and a 5.5' shoulder, which includes part of the 2' integral curb on the right.

Preliminary Field Review/Scope of Work Report

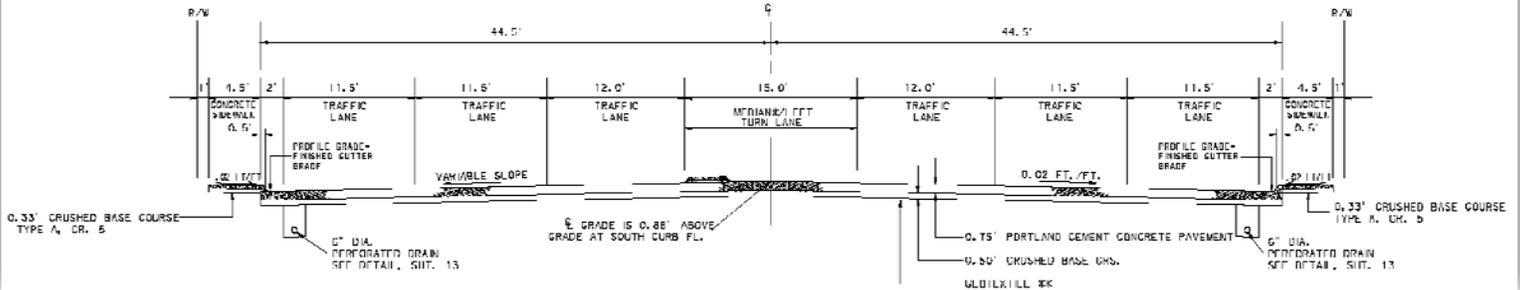
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Project Manager: Christie W. McOmber

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Typical Section No. 2 – Station 59+06.0 (free right turn lane onto River Drive) to 131+24.5 (18th Street):

TYPICAL SECTION NO. 2



From the left side of the typical there is a 4.5' sidewalk, 2' integral curb (providing a 1.5' shoulder), two 11.5' travel lanes, a 12' wide travel lane, a 15' median / left turn lane, another 12' travel lane, two more 11.5' travel lanes, 2' integral curb (providing a 1.5' shoulder), and 4.5' sidewalk on the right.

According to the roadlog, there have been no improvement projects on this route since construction in 2000; however, maintenance has applied asphalt patches in various locations along the project limits.

Horizontal Alignment

As-builts show that there are two centerlines from Station 56+35.80 to 66+29.00. At Station 66+29.00 there is one centerline used for the horizontal alignment for the remainder of the roadway.

In the first segment of the project no horizontal curves are present; however, according to the as-built project two angle points exist:

At Station 58+00.00 $\Delta = 0^{\circ}24'02''$ LT. along the southern most alignment

At Station 58+00.00 $\Delta = 1^{\circ}44'53''$ RT. along the northern most alignment

The point of intersection (PI) between these two alignments and the single alignment from this point forward is located at 66+29.00. At this PI deflection angles are experienced by the traveling public. The angle points are as follows:

$\Delta = 1^{\circ}20'51''$ LT. along the southern most alignment

$\Delta = 1^{\circ}44'53''$ LT. along the northern most alignment

The remainder of the project follows one centerline. There is one horizontal curve along this segment of the project. This curve is a 2,864.79' simple curve to the right. The PI for this curve is located at Station 71+21.00.

The majority of these deflection angles are slightly larger than the desired 1° angle for urban areas. The simple curve located along this project meets the Geometric Design Criteria for an Urban Principal Arterial. Due to the limited scope of this project, these deflection angles and horizontal curve will not be adjusted.

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Vertical Alignment

The existing vertical alignment meets current design standards.

The maximum grade of approximately 3.8% meets the Geometric Design Criteria for Urban Principal Arterials of 6% for level terrain. Passing sight distance and stopping sight distance will not be addressed with this pavement preservation project.

PVMS Data

The survey year 2008 and run year 2009 indices for the roadway are listed in the PVMS database:

RP 92.83 to RP 94.63

Recommended Treatment for:

2009 – CPCC Minor Rehabilitation

2011 – CPCC Minor Rehabilitation

PVMS INDICES	
Ride	55.4 (Poor)
Rut	74.5 (Good)
Alligator Cracking	82.7 (Good)
Miscellaneous Cracking	84.9 (Good)

Bridges

The following table identifies the structures that this project connects to:

Intersecting Features	Location (RP / Sta.)	Deck Width (feet)	Length (feet)	Year Built	Structure Status	Direction of Traffic along Structure
Missouri River, U-5205, and BNSF RR	94.82 / 45+89.00	28'	2,093	1951 Reconstructed in 1983	Concrete	East Bound Traffic
Missouri River, U-5205, and BNSF RR	94.82 / 46+06.00	40'	2,122	1983	Concrete	West Bound Traffic

The construction project numbers are FGU 388 1 2 and F 60-2(5)92 1 2 respectively.

Traffic Data

The following engineering study evaluation from RP 92.844 to 94.602 was determined using weigh-in-motion (WIM) sites and reflects a five-year average:

2010 (Current) AADT = 39,110

2011 (Letting Year) AADT = 39,500

2031 (Design Year) AADT = 48,200

DHV = 4,340

Percent of Trucks = 3.0 %

ESAL = 439

Basis of Projected Traffic Growth = 1.0 %

Accident Analysis

An accident analysis is not required for this type of pavement preservation project.

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Major Design Features

- a. **Design Speed.** A design speed of 35 mph was used on NH 60-2(33)93, which was the reconstruction project in 2000. The posted speed limit is 35 mph throughout the project limits.

The design speed of 40 to 45 mph is the Geometric Design Criteria for multi-lane, curbed, Urban Principal Arterials. The adjacent reconstruction project, NH 60-2(73)92, is using a design speed of 45mph. This design speed will also be used along this pavement preservation project.

- b. **Horizontal Alignment.** As stated in the physical characteristics section of this project, the angle points do not meet the Geometric Design Criteria for Urban Principal Arterials. The existing horizontal alignment is adequate for a preventative maintenance treatment, and no adjustments will be made with this project.
- c. **Vertical Alignment.** The existing vertical alignment meets the Geometric Design Criteria for Urban Principal Arterials. Because of the limited scope with this project, no adjustments will be made to the vertical alignment.
- d. **Typical Sections and Surfacing.** Due to the nature of this project, existing surface widths will not be altered. The PTW varies between 83.8 feet and 88 feet. Four 12' travel lanes with a 20' median / left turn lane dividing the north and south bound lanes exist along the beginning section of this project. The remainder of this route contains four 11.5' travel lanes and two 12' travel lanes with a 15' concrete curb median / left turn lane dividing the north and south bound lanes. Details for concrete crack sealing and other types of concrete repairs will be included in the plans with quantities.
- e. **Geotechnical Considerations.** Due to the nature of this project, geotechnical considerations are not anticipated for this project.
- f. **Hydraulics.** Due to the nature of this project, hydraulic considerations are not anticipated for this project.
- g. **Bridges.** The table located in the physical characteristics section provides information regarding structures adjacent to the project. No guardrail upgrades are necessary within the project limits.
- h. **Traffic.** Pavement markings damaged by the concrete repairs will be replaced with this project. Any traffic loops damaged by repairs will also be replaced as necessary. At this time, only the two most northern loop detectors located at 2nd Street might be affected by this project. No new signing or delineation will be included with this project.
- i. **Pedestrian/Bicycle/ADA.** Due to the limited scope of this project, no new ADA features or impacts to existing features are anticipated.
- j. **Miscellaneous Features.** The grass median located at the beginning of this project will be replaced with Federal Aid Project BH 5299(85), D3 Br Deck Rehab/Repair 09, a minor deck rehabilitation project, which will be using this median as a crossover.

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- k. **Context Sensitive Design Issues.** No context sensitive design issues will be addressed with this project.

Other Projects

Other than the two adjacent projects mentioned above, there are numerous projects scheduled for construction in the Great Falls Urban Area during the 2011 construction season:

- STPHF 60-2(95)96, 2002 – 10th Ave So/Fox Farm Rd – (GF), an intersection improvement project,
- NH 60-2(92)93, River Dr – 15th to 25th (GF), an overlay and seal & cover project,
- NH 103-1(12)0, Central Ave West (GTF), a mill, overlay, and seal & cover project,
- STPU 5204(3), Smelter Avenue – Black Eagle, a reconstruct project,
- UPP 5201(21), 1st Ave N – 9th to 25th – GTF, an overlay and seal & cover project,
- UPP 5201(21), 2nd Ave N – 37th to 15th, an overlay and seal & cover project, and
- UPP 5201(21), 1st Ave N – 25th to 38th, an overlay and seal & cover project.

There should be no major effects on this project due to the adjacent projects.

Location Hydraulics Study Report

A Location Hydraulics Study Report is not necessary for this surfacing rehabilitation project.

Design Exceptions

No design exceptions are anticipated for this project.

The majority of the deflection angles along the horizontal alignment are slightly larger than the desired 1° angle for urban areas. The simple curve located along this project meets the Geometric Design Criteria for an Urban Principal Arterials. Due to the limited scope of this project, these deflection angles and horizontal curve will not be adjusted.

The existing vertical alignment meets current Geometric Design Criteria and will not be altered with this project.

Right-of-Way

No new right-of-way will be required for this project.

Access Control

Access Control is not being implemented on this project.

Utilities/Railroads

Utilities

Due to the nature of this project, no major utility involvement is anticipated. Water valve adjustments and possibly manhole adjustments will be necessary as concrete is repaired around such features.

Railroads

A BNSF Railway spur crosses under the roadway just west of the project limits; however, no involvement with the railway is expected.

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According to F-BHF-RTF 60-2(5)92 U 2 as-builts the centerline of the closest railway crosses the west bound bridge at Station 55+89.98 and the bridge end is at Station 56+66.3. The minimum clearance between this bridge and all railway crossings is 22'-1". No work will be performed on the structure with this project.

According to FG 388(2) as-builts the centerline of the closest railway crosses the east bound bridge at Station 55+41.60 and this bridge end is at Station 56+35.8. The minimum clearance between this bridge and all railway crossings is 14'. No work will be performed on the structure with this project.

The railway crossings are more than 50 feet away from the project limits as the crossing is via structures that are not included within this project. Due to the limited work proposed for this project, no permits are likely. No work will be performed on the structure with this project.

Intelligent Transportation Systems (ITS) Features

There are no ITS solutions that will be designed within this project.

Survey

Due to the limited scope of this project, there is no need for a major survey. Observation by maintenance or design members to provide a quantity of cracks and panels to be repaired will be required for the design of this project.

Public Involvement

Due to the limited scope of the project, a level "A" public involvement plan is appropriate. The plan will include a news release, which will explain the project and include a department point of contact.

Environmental Considerations

This project meets the criteria for the Statewide Programmatic Categorical Exclusion. No apparent significant environmental concerns or issues were identified.

Energy Savings/Eco-Friendly Considerations

Due to the nature of this project, extending the useful life of the pavement is aimed directly at minimizing the footprint on the environment. This is accomplished by postponing reconstruction projects through routine maintenance.

Experimental Features

No experimental features will be included with the scope of this project.

Traffic Control

Because this is a rapid moving project, shifting traffic to one lane of travel for short periods will be used to maintain working space. Night work may be required for some construction activities in order to reduce impacts to the traveling public. Longer-term lane shifts and reductions will likely be necessary to repair the panels adjacent to the north Warden Bridge.

A Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP) is appropriate for this project.

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Traffic issues that will require special consideration are as follows:

- Swift setup and removal of traffic signing in accordance with the Manual on Uniform Traffic Control Devices will be necessary, as this is a heavily used route.
- Extra caution should be used by the workers to maintain a safe working area as far away from the traveling lanes as possible.
- Limit work requiring lane closures to off-peak hours or night time work.

Project Management

The Great Falls District will be responsible for the plans. Christie W. McOmber, P.E., is the Great Falls District Projects Engineer.

This project is not under full FHWA oversight.

Preliminary Cost Estimate

The project was programmed at a construction cost of \$47,344. After further investigating the concrete repairs necessary for this roadway, the initial scope of the project was broadened. A preliminary estimate based on initial design quantities provides the following costs:

Cost Estimate:

		Estimated Cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work		\$203,908		
Traffic Control		\$75,000		
Subtotal		\$278,908		
Mobilization	(15%)	\$41,836		
Subtotal		\$320,744		
Contingencies	(25%)	\$80,186		
Total CN		\$400,930	\$85,661	\$486,592
CE	(10%)	\$40,093	\$8,566	\$48,659
TOTAL CN+CE		\$441,023	\$94,227	\$535,251
Inflation Factor (PPMS) = 0.213656451592				

Note: Inflation is calculated in PPMS to the letting date plus one year to estimate mid-point of construction. 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.

The construction cost for this project is \$286,379 per mile.

Ready Date

The current OPX2 ready date is November of 2010. This project is slightly behind schedule with its projected finish date in OPX2 at January of 2011. The project will be able to meet the ready date. No target letting date has been set.

Site Map

The project site map is attached.

Preliminary Field Review/Scope of Work Report

NH 60-2(92)93

Project Manager: Christie W. McOmber

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FEDERAL AID PROJECT NH 60-2(92)93 CONCRETE REHABILITATION 10TH AVE S - WARDEN BR - 18TH - GF CASCADE COUNTY

LENGTH 1.4 MILES

