



November 30, 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
STPP 80-1(24)15
Geraldine-Arrow Cr
Control Number: 7362000

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
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.: STPP 80-1(24)15 ID: UPN 7362000 Project Name: Geraldine – Arrow Cr

Reference Post (Station) RP 14.682 to Reference Post (Station) RP 43.100

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

Type of Proposed Pavement Preservation Activity: Work Type 185 Resurfacing – Crack Sealing

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"/>	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 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 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 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 November 16, 2010
Applicant Title Date

Approved by: Andy Brunace ENVIRONMENTAL ENGINEERING 12/1/10
SECTION SUPERVISOR Title Date
Environmental Services
(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. *Paul Ferry 11/17/2010*
 Highways Engineer

Date: November 16, 2010

Subject: STPP 80-1(24)15
 Geraldine – Arrow Cr
 UPN 7362000
 Work Type 185 – Resurfacing – Crack Sealing

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on **November 17, 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 Preconstruction Engineer for approval.

I recommend approval:

Approved _____ Date _____

Distribution:

Jim Walther, Engineering, Preconstruction Engineer	Paul Ferry, Highways Engineer
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	

cc:

Dave Jensen, Fiscal Programming Section Supervisor	Damian Krings, Road Design Engineer
Dustin Rouse, Road Design Area Engineer	Chouteau County Commissioners, PO Box 459, Fort Benton, MT 59442-0459

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	Linda Cline, District R/W Design
Pierre Jomini, Safety Management Engineer	Jerilee Weibel, District R/W Supervisor
Stephanie Brandenberger, Bridge Area Eng, G.F. District	Jean Riley, Planner
Mary Gayle Padmos, PvMS Engineer	Doug Wilmot, G.F. District Construction Engineer
Daniel Hill, Pavement Analysis Engineer	Dave Hand, Great Falls District Maintenance Chief
Lee Grosch, District Geotechnical Manager	Dennis Ghekiere, District Utility Agent
Stan Kuntz, G.F. District Materials Lab	Steve Prinzing, District Preconstruction Engineer
Marty Beatty, Engineering Information Services	Christie McOmer, District Projects Engineer
Paul Grant, Public Involvement Officer	James Combs, District Traffic Engineer

Preliminary Field Review/Scope of Work Report

Introduction

This report was derived from information taken from the Preliminary Field Review conducted on November 9, 2010 with the following individuals in attendance:

Mick Johnson	District Administrator	MDT- Great Falls
Christie McOmber	District Projects Engineer	MDT- Great Falls
Jeania Cereck	District Design Supervisor	MDT- Great Falls
Brendan Scott	Project Designer	MDT- Great Falls
Dennis Oliver	Maintenance	MDT- Great Falls
Kendall Squires	Maintenance	MDT- Great Falls
Steve McEvoy	Surfacing Design	MDT- Helena

Proposed Scope of Work

This project was nominated as a preventative maintenance crack seal. The intent of this project is to extend the life of the pavement by crack sealing the existing roadway. During the field review it was determined that an additional treatment is needed to extend the life of the facility. The entire project will receive a crack seal. The first ±9.6 miles of the project, RP 14.682 to RP 24.259, will receive a Microsurfacing treatment.

Microsurfacing is applied in two lifts and can restore the proper surface profile, fill ruts 1.5” deep, provide transverse surfacing leveling, can be applied in a broad range of temperature and weather conditions. The life expectancy usually exceeds 7 years, and traffic is permitted within one hour. This treatment will fill in the ruts, improve the ride, seal the cracks, increase friction, and maintain the existing top width.

Purpose and Need

Significant transverse and longitudinal cracks are present along this project. It is necessary to provide microsurfacing and crack sealing to prevent future pavement deterioration.

Project Location and Limits

- A. This project is located in Chouteau County on Montana Primary 80 beginning at RP 14.682, east of Fort Benton, and proceeding southeast for approximately 28.4 miles to RP 43.100, 3 miles north of the Chouteau and Fergus County line. The functional classification of this route is a Minor Arterial (NHS - Non Interstate).
- B. This project includes the towns of Geraldine and Square Butte.
- C. Original construction from RP 14.682 to RP 43.435 along this roadway was completed under the following projects: S 290(13), S 290(16), S 307(12), S 307(15), and S 307(14). The typical section was comprised of 0.2’ Comp. Plant Mix Surfacing, 0.15’ Comp. Top Surfacing, 0.5’ Comp. Cr. Base Surf. Type A, and 0.5’ Comp. Cr. Base Surf. Type B.
- D. As-Builts:

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

Original As-Built Project ID	To	From	Year Built
	RP	RP	
S 290(13)	14.682	24.259	1962

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S 290(16)	24.259	29.911	1964
S 307(12)	29.911	34.518	1964
S 307(15)	34.518	39.616	1965
S 307(14)	39.616	43.435	1964

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

Improvement As-Built Project ID	To	From	Year Built	Treatment
	RP	RP		
RTF 80-1(12)	14.682	28.061	1995	Cold-In Place- Recycle & Overlay
STPP 80-1(16)28	28.061	43.435	2002	Overlay

A preventative maintenance crack seal was completed by MDT maintenance forces from RP ±28.5 to RP ±35.6 in 2004.

Work Zone Safety and Mobility

At this time, Level 3 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). These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

- A. The P.T.W. traverses level terrain and is used primarily for farm and ranch land. The majority of the project passes through rural areas, but does travel through some urban settings.
- B. No changes to the horizontal or vertical alignments are proposed with this project. The existing horizontal and vertical alignment features are adequate for the scope of this project.

The minimum radius within the project limits is 1,910', which exceeds the Geometric Design Criteria for Rural Principal Arterials of 960' feet for level terrain.

C. PVMS Data

The survey-year 2009 and run-year 2010 indices for the roadway are listed in the PVMS database:

RP 14.67 to RP 28.00

Recommended Treatment for:

2009 – C_AC Crack Seal & Cover

2010 – C_AC Crack Seal & Cover

PVMS INDICES	
Ride	77.8 (Fair)

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Rut	79.1 (Good)
Alligator Cracking	98.3 (Good)
Miscellaneous Cracking	98.3 (Good)

RP 28.00 to RP 43.10

Recommended Treatment for:

2009 – C_AC Crack Seal & Cover

2010 – C_AC Crack Seal & Cover

PVMS INDICES	
Ride	81.4 (Good)
Rut	91.6 (Good)
Alligator Cracking	99.2 (Good)
Miscellaneous Cracking	98.7 (Good)

The following table identifies structures built within the project limits:

Structure Description	Location (RP)	Deck Width (feet)	Length (feet)	Year Built	Structure Status
Chimney Rock	31.51	29'	57'	1964	Wood
Flat Creek	32.49	29'	78'	1964	Wood
Tributary Flat Creek	33.45	29'	27'	1949	Wood
Cowboy Steele Creek	40.93	29'	77'	1964	Wood
Butte Creek	41.38	29'	77'	1964	Wood

Traffic Data

Traffic data is not required for seal and cover projects.

Crash Analysis

Crash data is not required for seal and cover projects.

Major Design Features

- A. **Design Speed.** From the geometric design criteria for Minor Arterials in level terrain a 55 mph design speed will be applied. The existing posted speed limit is 70 mph daytime/65 mph nighttime.
- B. **Horizontal Alignment.** The existing horizontal alignment is adequate for a preventative maintenance treatment.
- C. **Vertical Alignment.** The existing vertical alignment is satisfactory for a preventative maintenance treatment.
- D. **Typical Sections and Surfacing.** Due to the nature of this project, existing surface widths will not be altered. The PTW varies between 28' and 47'. Milling will not be required on this project, nor will a leveling course be used. Details for crack sealing will be included in the plans with quantities.

A microsurfacing treatment will be used from RP 14.682 to RP 24.259. The existing finished top width of the roadway through this area is 30'. A scratch course will be applied first and will serve to fill in the ruts in the travel lanes. A top lift, to finish the profile will

Preliminary Field Review/Scope of Work Report

then be applied. Only the ¼” or larger cracks will need sealed. The smaller cracks will be covered with the Microsurfacing.

- E. **Geotechnical Considerations.** Because of the limited scope of this project, geotechnical considerations will not be addressed.
- F. **Hydraulics.** Due to the nature of this project, hydraulic considerations are not anticipated for this project.
- G. **Bridges.** No bridge issues will be addressed with this seal and cover.
- H. **Traffic.** Due to the limited scope of this project, no new signing is anticipated for this project.

New paint quantities are requested from RP 14.682 to RP 24.259 only.

- I. **Pedestrian/Bicycle/ADA.** Due to the limited scope of this project, no new ADA features or impacts to existing features are anticipated for this project.
- J. **Miscellaneous Features.** No miscellaneous features will be addressed with this project.
- K. **Context Sensitive Design.** No context sensitive design issues will be addressed with this project.

Other Projects

There are no known projects adjacent to this crack seal project.

Location Hydraulics Study Report

No hydraulics issues are anticipated with this project.

Design Exceptions

No design exceptions are anticipated for this project.

Right-of-Way

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

Access Control

The existing access control falls under regulated access for the route included in this project. There will be no modifications to the existing access control.

Utilities/Railroads

- A. Due to the nature of this project, no utility involvement is anticipated.
- B. BNSF Railway tracks run parallel to the roadway throughout a large portion of the project; however, no involvement with the railroad is anticipated.

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, no survey is necessary. Observation by maintenance

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Project Manager: Christie W. McOmber

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forces provided a quantity of cracks for this project. The observation was delivered on October 22, 2010.

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

- A. No apparent significant environmental issues have been identified. It is anticipated that the project meets the criteria for the Statewide Programmatic Categorical Exclusion. An environmental checklist is being supplied with the Preliminary Field Review/Scope of Work Report.
- B. Due to the project scope, no effects on any threatened, endangered, proposed, candidate or sensitive species are anticipated with this project. No wetlands, streams, or other aquatic resources will be affected. Therefore, a Stream Protection Act 124 and Clean Water Act 40 permit will not be required.

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

There are currently no experimental features planned for this project at this time.

Traffic Control

- A. 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.
- B. The Microsurfacing between RP 14.682 and RP 24.259 will include two passes of surfacing (scrape lift and final lift) as the majority of cracks will be filled by the Microsurfacing.

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 following items were considered in the roadwork preliminary cost estimate: microsurfacing aggregate & emulsion, crack sealing, traffic control, and miscellaneous work. The cost per mile is approximately \$25,776.

	Estimate	Inflation (INF)	w/INF + IDC
STPP 80-1(24)15	Costs	(from PPMS)	(from PPMS)
Road work	\$603,798		
Traffic Control	\$30,000		

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 Project Manager: Christie W. McOmber

Subtotal		\$633,798		
Mobilization	10%	\$63,380		
Subtotal		\$697,178		
Contingencies	5%	\$34,859		
Total CN		\$732,037	\$134,456	\$982,169
CE	10%	\$73,204	\$13,446	\$98,217
IDC:	13.35%		TOTAL	\$1,080,386
Inflation Factor (ppms)				<i>0.18367346</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 13.35% as of FY 2011.

Ready Date

The OPX2 ready date is November 1, 2010, with an anticipated letting date of March 5, 2011. The project has been authorized late. Consequently, the project is late to Ready but is anticipated to be finished far enough in advance for letting.

Site Map

The project site map is attached.

MONTANA DEPARTMENT OF TRANSPORTATION

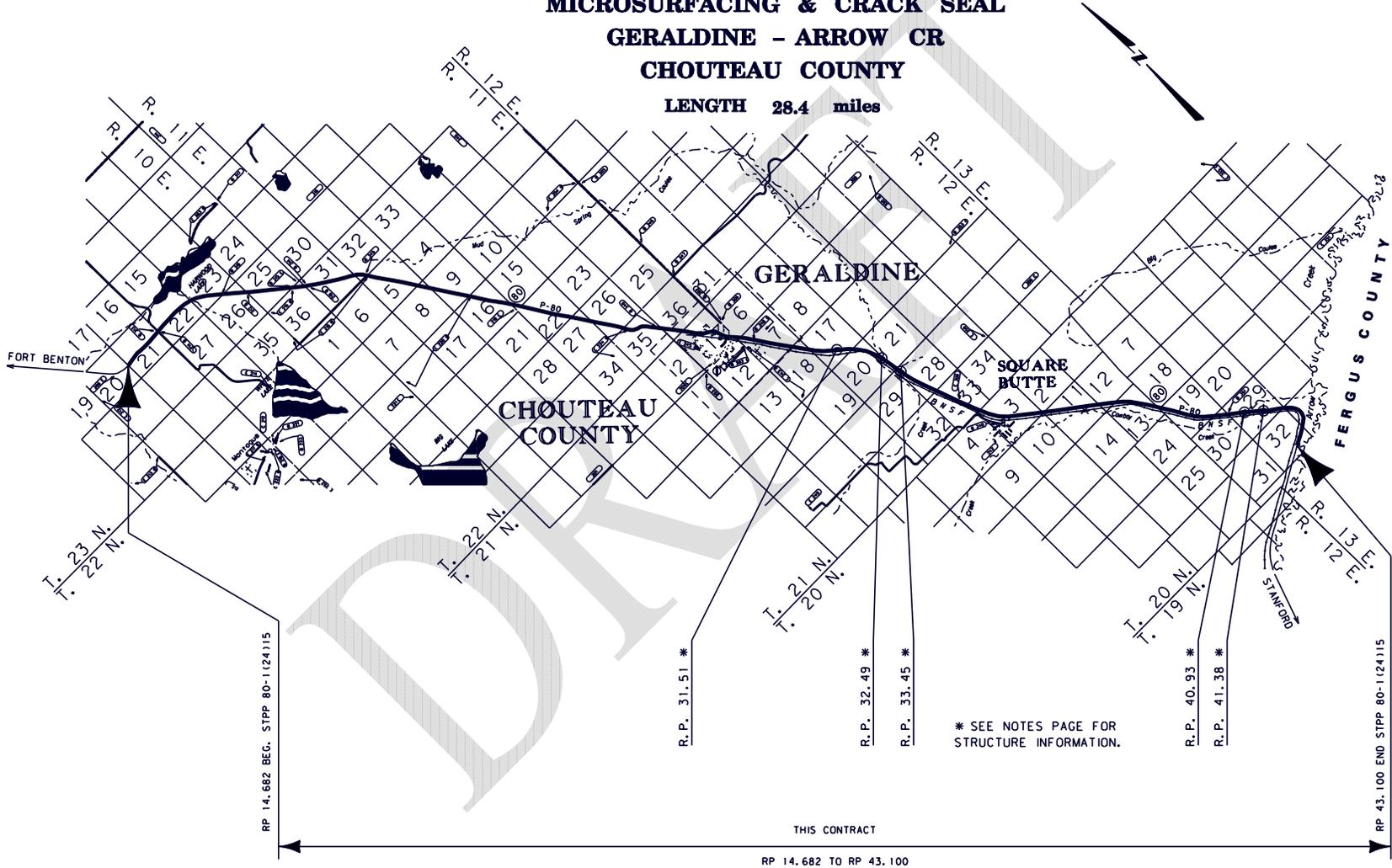
FEDERAL AID PROJECT STPP 80-1(24)15

MICROSURFACING & CRACK SEAL

GERALDINE - ARROW CR

CHOUTEAU COUNTY

LENGTH 28.4 miles



* SEE NOTES PAGE FOR
STRUCTURE INFORMATION.

THIS CONTRACT
RP 14.682 TO RP 43.100

RP 14.682 BEG. STPP 80-1(24)15

RP 43.100 END STPP 80-1(24)15