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Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

County **WIBAUX**

March 28, 2005

RECEIVED
MAR 29 2005
LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

To Whom It May Concern:

Subject: Cooperating Agency Environmental Documentation

As a Cooperating Agency under the provisions of 23 CFR 771.111 the Montana Department of Transportation (MDT) is providing you a copy of this project's environmental documentation.

This environmental documentation complies with the provisions of 23 CFR 771.117(a) and (d) for categorically excluding this proposed project from further National Environmental Policy Act (NEPA) (42 U.S.C. 4321, et seq.) documentation requirements. The attached also complies with the provisions of 75-1-103 and 75-1-201, MCA (see ARM 18.2.237 and 18.2.261, MEPA "Actions that qualify for a Categorical Exclusion" as applicable to the MDT).

If you have any questions concerning the attached environmental documentation please call the MDT Environmental Services Division at (406) 444-7228.

Sincerely,

Jean A Riley, P.E.
Jean A. Riley, P.E.
Engineering Bureau Chief
Environmental Services Division

S:\ADMIN\48_GEN_CORRESP\MAILINGS\COOP AGENCY LTR.DOC\SMITHCREEK_47KMNofWIBAUX_CN4829

Attachment

serving you with pride

Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

March 22, 2005

MASTER FILE COPY

RECEIVED
MAR 22 2005
FHWA
MONTANA DIVISION

Janice W. Brown
Division Administrator
Federal Highway Administration
2880 Skyway Drive
Helena, MT 59602-1230

Subject: BR 9055(9)
Smith Cr – 47km North of Wibuax
Control # 4829

This is to request approval of this proposed project as a Categorical Exclusion (CE) under the provisions of 23 CFR 771.117(d), and the Programmatic Agreement as signed by the MONTANA DEPARTMENT OF TRANSPORTATION (MDT) and the FHWA on April 12, 2001. Copies of its Preliminary Field Review Report (PFR) and Project Location Map are attached. This proposed action also qualifies as a CE under ARM 18.2.261 (Sections **75-1-103** and **75-1-201, MCA**).

The following form provides the documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion Approval (PCE) as initially agreed by the (former) MONTANA DEPARTMENT OF HIGHWAYS (MDOH) and the FHWA on December 6, 1989. (Note: An " X " in the "N/A" column is "Not Applicable" to, while one in the "UNK" column is "Unknown" at the present time for this proposed project.)

NOTE: A response in a box will require additional documentation for a Categorical Exclusion request in accordance with 23 CFR 771.117(d).

	YES	NO	N/A	UNK
1. This proposed project would have (a) significant environmental impact(s) as defined under 23 CFR 771.117(a).	☐	☒	☐	☐
2. This proposed project involves (an) unusual circumstance(s) as described under 23 CFR 771.117(b).	☐	☒	☐	☐
3. This proposed project involves one (or more) of the following situations where:				
A. Right-of-Way, easements, and/or construction permits would be required.	☒	☐	☐	☐
1. The context or degree of the Right-of-Way action would have (a) substantial social, economic, or environmental effect(s).	☐	☒	☐	☐
2. There is a high rate of residential growth in this proposed project's area.	☐	☒	☐	☐
3. There is a high rate of commercial growth in this proposed project's area.	☐	☒	☐	☐
4. Work would be on and/or within approximately 1.6 kilometers (1± mile) of an Indian Reservation.	☐	☒	☐	☐

	YES	NO	N/A	UNK
5. There are parks, recreational, or other properties acquired/improved under *Section 6(f)* of the *1965 National Land & Water Conservation Fund Act* (**16 USC 460L**, *et seq.*) on or adjacent to proposed the project area.	☐	☒	☐	☐
The use of such *Section 6(f)* sites would be documented and compensated with the appropriate agencies. (*e.g.*: MDFWP, local entities, etc.).	☐	☐	☒	☐
6. Are there any sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under *Section 106* of the *National Historic Preservation Act* (**16 USC 470**, *et seq.*) by the State Historic Preservation Office (SHPO), which would be affected by this proposed project.	☐	☒	☐	☐
7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under *Section 4(f)* of the 1966 *US DEPARTMENT OF TRANSPORTATION Act* (**49 USC 303**) on or adjacent to the project area.	☐	☒	☐	☐
a. "Nationwide" Programmatic *Section 4(f)* Evaluation forms for these sites are attached.	☐	☐	☒	☐
b. This proposed project requires a full (*i.e.*: DRAFT & FINAL) *Section 4(f)* Evaluation.	☐	☐	☒	☐
B. The activity would involve work in a streambed, wetland, and/or other water body (ies) considered as "waters of the United States" or similar (*e.g.*: "state waters").	☒	☐	☐	☐
1. Conditions set forth in *Section 10* of the *Rivers and Harbors Act* (**33 USC 403**) and/or *Section 404* under 33 CFR Parts 320-330 of the *Clean Water Act* (33 USC 1251-1376) would be met.	☒	☐	☐	☐
2. Impacts in wetlands, including but not limited to those referenced under Executive Order (EO) #11990, and their proposed mitigation would be coordinated with the Montana Inter-Agency Wetland Group.	☒	☐	☐	☐
3. A 124SPA Stream Protection permit would be obtained from the MDFWP?	☒	☐	☐	☐
4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.	☐	☒	☐	☐
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	☐	☐	☒	☐
5. Tribal Water Permit would be required.	☐	☒	☐	☐
6. Work would be required 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 as published by the US Department of Agriculture, or the US Department of the Interior.	☐	☒	☐	☐

	YES	NO	N/A	UNK
The designated National Wild & Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	☐	☒	☐	☐
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	☐	☒	☐	☐
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	☐	☒	☐	☐
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	☐	☒	☐	☐
In accordance with *Section 7* of the *Wild and Scenic Rivers Act* (**16 USC 1271 – 1287**), this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or US Bureau of Land Management (Missouri River).	☐	☐	☒	☐
C. This is a "Type I" action as defined under 23 CFR 772.5(h), which typically consists of highway construction on a new location or the physical alteration of an existing route which substantially changes its horizontal or vertical alignments or increases the number of through-traffic lanes.	☐	☒	☐	☐
1. If yes, are there potential noise impacts?	☐	☐	☒	☐
2. A Noise Analysis would be completed.	☐	☐	☒	☐
3. There would be compliance with the provisions of both 23 CFR 772 for FHWA's Noise Impact analyses and MDT's Noise Policy.	☒	☐	☐	☐
D. There would be substantial changes in access control involved with this proposed project.	☐	☒	☐	☐
If yes, would they result in extensive economic and/or social impacts on the affected locations?	☐	☐	☒	☐
E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities:				
1. Provisions would be made for access by local traffic, and be posted for same.	☒	☐	☐	☐
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	☒	☐	☐	☐
3. Interference to local events(*e.g.*: festivals) would be minimized to all possible extent.	☒	☐	☐	☐
4. Substantial controversy associated with this pending action would be avoided.	☒	☐	☐	☐

	YES	NO	N/A	UNK
F. Hazardous wastes /substances, as defined by the US Environmental Protection Agency (EPA) and/or the Montana Department of Environmental Quality (MDEQ), and/or (a) listed "Superfund" (under *CERCLA* or *CECRA*) site(s) are currently on and/or adjacent to this proposed project.	☒	☐	☐	☐
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	☒	☐	☐	☐
G. The Montana Pollutant Discharge Elimination System's conditions (ARM 16.20.1314), including temporary erosion control features for construction would be met.	☒	☐	☐	☐
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	☒	☐	☐	☐
I. Documentation of an "invasive species" review to comply with both EO #13112 and the *County Noxious Weed Control Act* (7-22-21, MCA), including directions as specified by the county (ies) wherein its intended work would be done.	☒	☐	☐	☐
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	☐	☒	☐	☐
If the proposed work would affect Important Farmlands, then an AD-1006 Farmland Conversion Impact Rating form would be completed in accordance with the *Farmland Protection Policy Act* (**7 USC 4201**, *et seq.*).	☐	☐	☒	☐
K. Features for the *Americans with Disabilities Act* (PL 101-336) compliance would be included.	☐	☐	☒	☐
L. A written Public Involvement Plan, would be completed in accordance with MDT's Public Involvement Handbook.	☒	☐	☐	☐
4. This proposed project complies with the *Clean Air Act's Section 176(c)* (**42 USC 7521(a)**, as amended) under the provisions of 40 CFR 81.327 as it's either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is not covered under the EPA's September 15, 1997 Final Rule on air quality conformity.	☒	☐	☐	☐
and/or				
B. "Nonattainment" area. However, this type of proposed project is either exempted from the conformity determination requirements (under EPA's September 15, 1997 Final Rule), or a conformity determination would be documented in coordination with the responsible agencies: (Metropolitan Planning Organizations, MDEQ's Air Quality Division, etc.).	☐	☐	☒	☐
C. Is this proposed project in a "Class I Air Shed" (Indian Reservations) under 40 CFR 52.1382(c)(3)?	☐	☒	☐	☐
5. Federally listed Threatened or Endangered (T/E) Species:				
A. There are recorded occurrences, and/or critical habitat in this proposed project's vicinity.	☐	☒	☐	☐

	YES	NO	N/A	UNK
B. Would this proposed project result in a "jeopardy" opinion (under 50 CFR 402) from the Fish & Wildlife Service on any Federally listed T/E Species?	☐	☐	☒	☐

The proposed project would not induce significant land use changes, nor promote unplanned growth. There would be no significant effects on access to adjacent property, nor to present traffic patterns.

This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (EO #12898). It also complies with the provisions of *Title VI* of the *Civil Rights Act* of 1964 (**42 USC 2000d**) under the FHWA's regulations (23 CFR 200).

In accordance with the provisions of 23 CFR 771.117(a), this pending action would not cause any significant individual, secondary, or cumulative environmental impacts. Therefore, the FHWA's concurrence is requested that this proposed project is properly classified as a Categorical Exclusion.

_____, Date: 3/22/05

Thomas L. Hansen, P.E.
Environmental Engineering Services Supervisor
MDT Environmental Services

Concur _____, Date: 3/24/05
Federal Highway Administration

S:\GLENDIVE DISTRICT\4829\4829ENPCE.doc

Attachments

cc: Ray Mengel, Glendive District Administrator
Kent Barnes, P.E. – Bridge Engineer
Paul Ferry, P.E. - Highway Engineer
John H. Horton - MDT Right-of-Way Bureau Chief
Suzy Althof - MDT Contract Plans
David W. Jensen - MDT Fiscal Programming Section
Jean Riley, P.E. – MDT Environmental Services Bureau Chief
Gene Kaufman, P.E. – FHWA
Project File

"ALTERNATIVE ACCESSIBLE FORMATS OF THIS DOCUMENT WILL BE PROVIDED ON REQUEST."

MASTER FILE COPY

Montana Department of Transportation
Helena, MT 59620-1001

Memorandum

To: Joseph P. Kolman, P.E.
Bridge Engineer

Thru: William S. Fullerton, P.E.
Bridge Design Engineer

From: Devin Roberts, P.E.
Bridge Area Engineer
Glendive District

Date: March 5, 2002

Project: BR 9055(9)
Smith Creek –47 km North of Wibaux
Control No. 4829
Project Work Type - 221

Subject: **Preliminary Field Review Report**

Please approve the **Preliminary Field Review Report** for the subject project.

Approved Joseph P. Kolman Date 3/5/02
Joseph P. Kolman, P.E.

We are requesting comments from the following individuals, who have also received a copy of the Report. **We will assume concurrences if no comments are received by (March 20, 2002).**

MJS:4829PFR.doc

Distribution: (all with attachment)
J. H. Horton
K.M. Barnes
C. S. Peil
P. Saindon
W.L. McChesney
S. Sternberg
R. E. Williams
J. A. Walther
R. D. Morgan
M.A. Goodman
G. Larson
B.A. Larsen
D. W. Jensen
M.A. Wissinger
B. F. Juvan
W. Scott
J. J. Moran
D. Grenfell – FHWA
Wibaux County Commissioners
File

Preliminary Field Review Report

BR 9055(9)
Smith Creek –47 km North of Wibaux
Control No. 4829
Project Work Type - 221

The preliminary field review for the subject project was conducted on October 17, 2001with the following people in attendance.

Ray Mengel	District Engineering Services Supervisor	Glendive
Gary Larson	Secondary Roads Engineer	Helena
Mark Studt	Bridge Bureau	Helena
Jerry Michel	Hydraulics Section	Helena
Paul Ferry	Road Design Section	Helena
Sam Scammon	Wibaux County Commissioner	
Sandy Nelson	Wibaux County Commissioner	
Gary Lawrence	Wibaux County Road Foreman	

Project Intent

The project was originally nominated with the intent of replacing a single bridge over Smith Creek. A second bridge crossing of Smith Creek is located approximately 1 km east of the original structure. This structure has a sufficiency rating of 40.5 and consequently is structurally deficient and eligible for replacement. The Bridge Bureau has determined that the replacement of the second bridge should be included in the project as well. The Transportation Commission has approved this request.

The intent of the project is to replace the existing bridges over Smith Creek with new structures. We anticipate that bridges will be used as the replacement structures.

The project will include enough approach work at each site to tie to the existing roadway. The roadway design features will meet the current criteria for low-volume off-system roads at both sites.

Location and Route Description

The existing bridges over Smith Creek are located on an off-system county road approximately 6 km and 7 km east of Secondary Highway 261 respectively and 47 km north of Wibaux in Wibaux County (T 19 N, R 60 E, SEC 27). The terrain adjacent to the project is level to rolling and is used primarily for grazing. The off-system road provides local access to the greater transportation network. We do not believe that the proposed project will alter existing traffic volumes or characteristics. We also do not anticipate that the use of the land adjacent to the project will change in the foreseeable future.

To differentiate between the two crossings the westernmost crossing of Smith Creek will be referred to as Site 1 and the eastern crossing will be referred to as Site 2 throughout the remainder of the report.

Purpose and Need

At Site 1 we intend to construct the new bridge on the existing alignment. We intend to replace the bridge at Site 2 on a new alignment upstream from the existing crossing.

The no-build alternative is not feasible, because of the structural deficiency of the existing bridges. If the bridges are not replaced, they will reduce the effectiveness of the route as a transportation facility, as well as potentially creating safety problems.

Existing Road Conditions

The project segments of the existing roadway were constructed by county forces, and no as-built plans are available. The roadway has a minimal gravel surface that provides a 6.0 m finished top width.

The project length at each Site will depend on the required hydraulic opening and configuration of the new bridges.

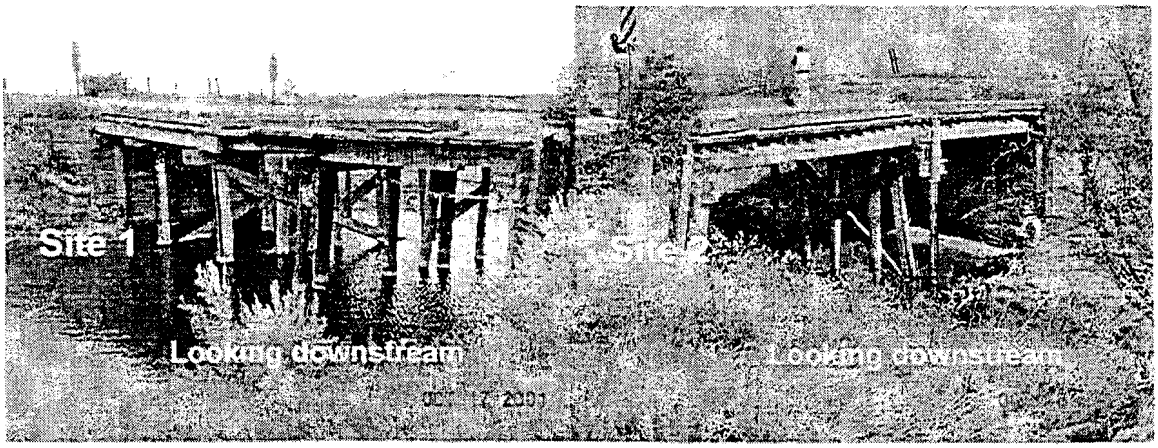
The bridge at Site 1 is located on horizontal and vertical tangents. The grades within the project limits do not exceed 1%. The existing fill slopes are 3:1 or steeper and the fill heights are generally less than 2 m high. The cuts are minimal in the vicinity of the bridge.

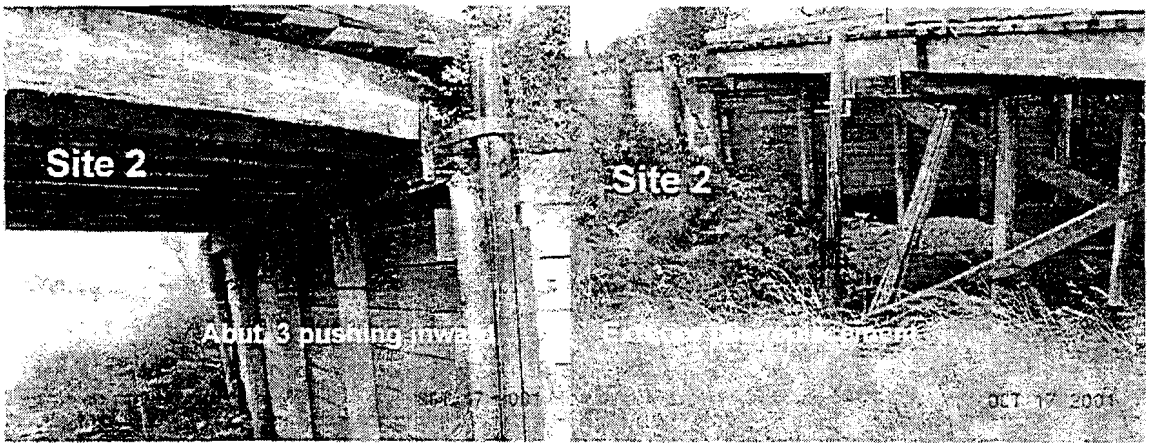
The bridge at Site 2 is also located on horizontal and vertical tangents. A horizontal curve is located just west of the existing bridge. The grades within the project limits do not exceed 1%. The existing fill slopes are 3:1 or steeper and the fill heights are generally less than 2 m high. The cuts are minimal in the vicinity of the bridge.

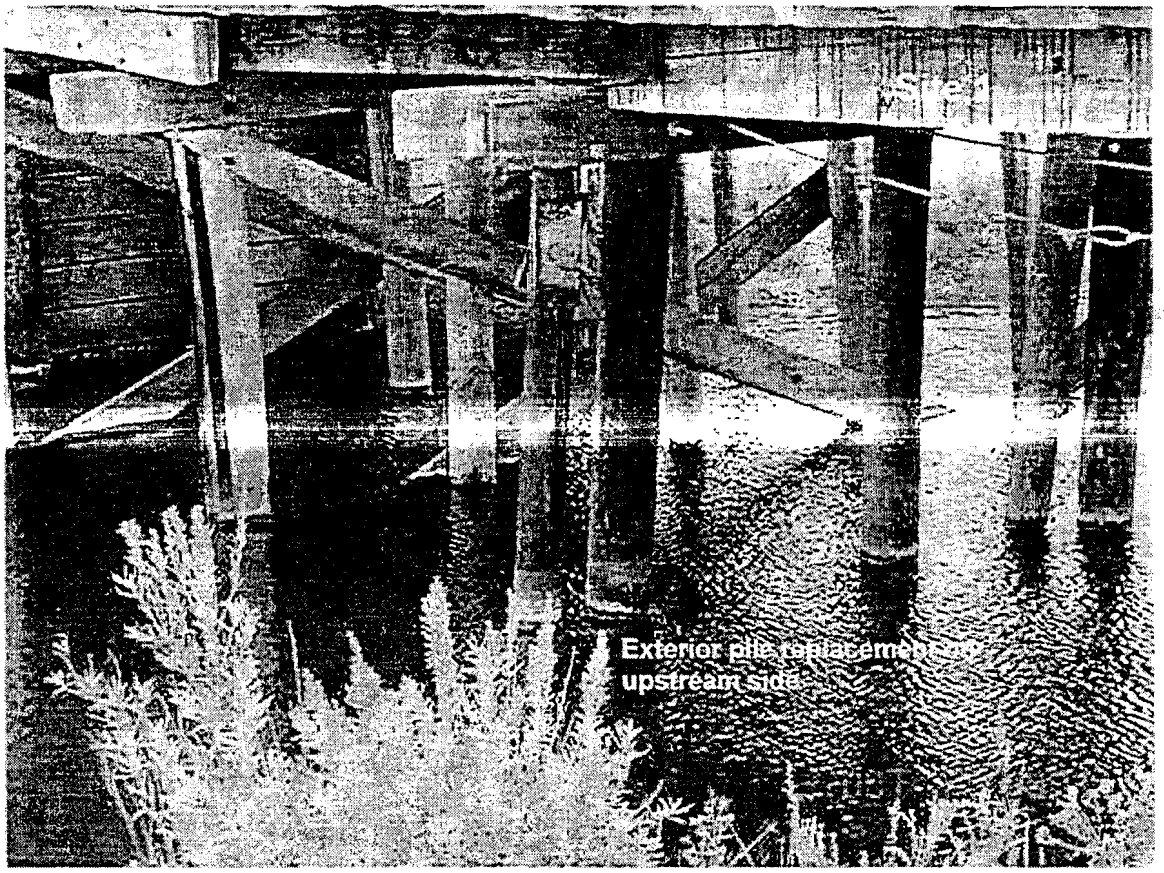
Existing Bridge Condition

	Site 1 Smith Creek 47 km North of Wibaux L55031000+07001	Site 2 Smith Creek 47 km North of Wibaux L55025015+09001
Year Built	1935	1935
Length (m)	12.19	12.19
Number of Spans	4	2
Span Lengths (m)	3.05-3.05-3.05-3.05	6.10-6.10
Width, rail to rail (m)	7.01	6.40
Superstructure Type (each span)	Timber / Timber	Timber / Timber
Substructure Type	Timber cap and piles	Timber cap and piles
Bridge Rail Type	Wood Curb	Wood Curb
Deck Type	Timber with gravel topping	Timber with gravel topping
Sufficiency Rating	39.3	40.5
Structure Status	Structurally Deficient	Structurally Deficient

These bridges are not candidates for rehabilitation.







Existing Smith Creek Bridges
(Date of Photos 10-17-01)

Traffic Data

The traffic data for the project is as follows:

2002 ADT = 110
2005 ADT = 110
2025 ADT = 140
DHV =20
D = 55-45 %
T = 3.6 %
EAL = 2 (Daily)
AGR = 1 %

There were no reported accidents at this location (SEC 27-34, T 19 N, R 60 E) between October 1, 1991 through September 30, 2001.

Design Criteria

Design Speed
The design speed for low volume off-system gravel roads is 70 km/h. We anticipate that all design features will meet the criteria for a 70 km/h design speed. There is no posted speed limit in the vicinity of the project.

Drainage – Site 1
The drainage area for Smith Creek at this crossing is 247 square kilometers. The Hydraulics Section has indicated that a bridge will be required for the replacement structure. The County officials indicated that water overtops the roadway on an almost annual basis at a sag located approximately 200 m west of the crossing.

Although county officials have indicated that the existing bridge has not had problems with ice jams or debris, the structure appears to have sustained damage from ice. Therefore, we recommend that the new structure clear span at least the low water channel. The creek's banks are well vegetated to the low-water channel. The channel appears stable and no scour or erosion problems were evident at the time of the review.

A significant amount of standing water is evident at the crossing and it extends at least 50 m upstream. The depth of the water is unknown. The low-water channel narrows to less than 3 m approximately 20 m downstream from the crossing. The county has constructed a low-water ford at this location.

The Smith Creek channel parallels the roadway downstream from the crossing and meanders close to the road approximately 80 m west of the structure. We recommend that the new construction avoid impacting the channel at this site. This meander appears to be stable and there is no evidence that it is going to impact the roadway at this location.

A temporary detour will be necessary to maintain traffic during construction. The required waterway opening for the detour will be determined by the Hydraulics Section.

There are no delineated floodplains within the project limits. The project should not affect any other drainages or irrigation facilities.

Drainage – Site 2
The drainage area for Smith Creek at this crossing is 220 square kilometers. The Hydraulics

Section has indicated that a bridge will be required for the replacement structure.

Although county officials have indicated that the existing bridge has not had problems with ice jams or debris, the structure appears to have sustained damage from ice. Therefore, we recommend that the new structure clear span at least the low water channel. The creek's banks are well vegetated to the low-water channel. The low-water channel is well defined and appears stable. A scour hole is located under and slightly downstream from the bridge. No other erosion problems were evident at the time of the review. From our review it was also not readily apparent that water overtops the roadway.

Since we propose constructing the new bridge on a new alignment upstream from the existing crossing, traffic can be maintained on the existing bridge during construction.

There are no delineated floodplains within the project limits. The project should not affect any other drainages or irrigation facilities.

Horizontal Alignment

At Site 1 we recommend that the new bridge be constructed on the existing horizontal alignment. The existing crossing is on a relatively long tangent. Consequently, using a new alignment would require the addition of at least three horizontal curves. A new alignment could potentially have utility conflicts, as well as greater right-of-way impacts. The use of a substantially different alignment would require substantially more road construction and would have greater right-of-way and environmental impacts.

At Site 2 we recommend that the new bridge be constructed on a new horizontal alignment located approximately 15 m upstream (south). We propose extending the back tangent of the curve located west of the crossing. A new curve would have to be introduced to tie the new alignment to the PTW east of the structure. We selected an offset on the upstream side because this location would require less of a skew and a correspondingly shorter structure.

Vertical Alignment

We anticipate that grade raises will probably be necessary at both crossings since the depth of the new bridges' superstructures will be greater than the superstructure depths of the existing bridges. We propose that the new vertical alignment provide the desirable SSD for at least a 70 km/h design speed.

The new grade should not affect the existing overtopping elevation at Site 1, since the limits of overtopping are outside the project limits. The Hydraulics Section will determine if perpetuating an overtopping elevation at Site 2 is a consideration. If so, we will provide a vertical alignment that meets the overtopping criteria.

Surfacing and Typical Section

We recommend that the surfacing at both sites consists of 230 mm of gravel. This surfacing is not based on a specific structural loading or R-value. However, it is better than the existing surfacing and is consistent with any anticipated future surfacing on this segment of the route. The surfacing will utilize 4:1 surfacing inslopes.

The new bridges will provide 8.4 m roadway widths. We recommend that the approaches at both structures also be constructed to an 8.4 m top to the ends of the guardrail. The roadway width should then be tapered to a 7.2 m width and the 7.2 m width will be utilized through the remainder of the project at both sites. The PTW width is approximately 7 m so the roadway will have a minimum tapers to the PTW at the beginning and end of the project.

Since the surfacing is gravel we recommend using a 3% crown on the roadway to promote

drainage. The bridge deck will be constructed with a 2% crown. Therefore, we also recommend that 2% crown be used on the roadway where it will be constructed to an 8.4 m roadway width.

New Bridge

The new bridges will provide an 8.4 m width from face of rail to face of rail. Standard T-101 bridge rail will be used. We anticipate three span structures using prestressed concrete beams. The bridge lengths at each Site will depend on the required hydraulic opening and configuration of the new bridges. The substructures will most likely have semi-integral abutments.

Grading

The grading on the project should be accomplished using Embankment-in-Place. We anticipate that the grading will be less than 20 000 cubic meters and that off-site borrow will be needed for the project. At Site 1 some of the material from the temporary detour may be used to construct the standard fill slopes. At Site 2 the material from the PTW can be used for the same purpose.

Detour

We discussed closing the road during construction. The county commissioners requested that the road remain open during construction since it is used as a mail route.

Consequently, at Site 1 the traffic will be maintained on a temporary detour during the construction of the new bridge. The detour should be located downstream (South) of the PTW. As noted in the "Drainage" section of this report the channel upstream from the crossing is relatively wide and has a significant amount of standing water. The channel downstream is less than 3 m wide and will be much easier to construct and remove. The county also currently has a low-water ford at this crossing.

The detour will have a design speed of 50 km/h. We feel this is adequate, since the average running speeds on this segment of the route are 60 km/h. Standard advance signing will be used and the location provides good sight distance. The detour will provide a 7.2 m roadway width and will have a gravel surface. All signing, flagging, etc. will be in accordance with MUTCD.

Geotechnical Consideration

No geotechnical problems were noted at the time of the review. A subsurface investigation will be needed for the design of the bridge foundations.

Traffic & Geometric Considerations

The project has no unique traffic problems and requires no special geometric features. New signing will be provided. The existing signs will be salvaged to Wibaux County. Pavement markings will not be needed, since the roadway has a gravel surface.

Exceptions to Standards

We may request an exception for the use of a reduced length of guardrail. We will also require an exception to use a detour design speed less than 60 km/h. Since this is off-system, any request for exceptions will be included in the Scope of Work Report. We do not anticipate the need for any other exceptions to the design criteria.

Miscellaneous

We recommend that the guardrail on the project be limited to bridge approach sections with optional terminal end treatments. This option will be evaluated after we have a preliminary alignment and grade. There will be no other guardrail within the project limits.

There are no mailboxes within the project limits at Site 1. A mailbox is located in the SW quadrant of Site 2. A new crashworthy mailbox will be installed. The traffic volumes on this route do not warrant a mailbox turnout.

A field approach is located in the NE quadrant of Site 1. After the bridge layout is designed and we have determined the location of the guardrail, we will need to evaluate if the approach needs to be relocated or an intersecting roadway transition can be used.

At Site 2, a field approach is located in the NW quadrant and a private approach is located in the SW quadrant. Both approaches will be affected by the construction and the private approach will be inside of the guardrail limits. After the bridge layout is designed and we have determined the location of the guardrail, we will need to evaluate if the approaches need to be relocated or an intersecting roadway transition can be used.

Right-of-Way & Utilities

The existing right-of-way widths are unknown, but the Wibaux County Commissioners indicated that the standard total easement width for county roads is a 9.1 m.

The acquisition of new right-of-way should not be needed at Site 1. A temporary construction permit will be necessary for the detour.

The acquisition of new right-of-way will be needed at Site 2. Temporary construction permits should not be necessary

At Site 1 an overhead power line crosses the roadway at the east end of the existing bridge. After the survey has been submitted we will need to determine if the line needs to be raised or if it will be affected by the detour. The project should have no other utility involvement.

An overhead power line is located south of the PTW and a buried telephone cable is located north of the PTW at Site 2. Neither utility should be affected by the project.

The project will have no railroad involvement.

Environmental Considerations

The proposed scope of work, replacing the existing bridges, constitutes modernization of the transportation facility. In addition, the initial review did not identify any significant environmental effects, issues or cumulative effects of the proposed work. Therefore, we anticipate that a Categorical Exclusion will provide a sufficient level of documentation for the proposed project in accordance with the guidelines of 23 CFR 771.117. However, the level of documentation may be revised pending information obtained from on-site reviews during the early stages of the project's development

No significant environmental effects or issues were identified. The project should have no 4(f) or 6(f) involvement. It should not affect any hazardous waste sites. The project's effect on any threatened or endangered species will be evaluated.

No wetlands will be impacted but some minor riparian fringe areas will be affected by the new construction. The effects on this area will be minimal since the project will be constructed on the existing alignment. We recommend that the ford at Site 1 be removed and the banks be revegetated when the detour is removed.

We anticipate that riprap will be placed at the ends of both new bridges to protect them from scour. The riprap will be keyed into the banks at both sites. The placement of riprap may affect some of the riparian fringe associated with the creek channel.

Although the impacts should be minimal, a cultural resource survey should be conducted.

Field Survey

We recommend that an aerial survey should be performed for this project. The aerial survey should extend far enough to the west to pick up the overtopping location at Site 1 (approximately 250 m west of the exiting bridge). At Site 2 it should extend through the existing horizontal curve to the west and at least 400 m to the east. Additional survey will be needed at both sites to locate channel elevations below the water surface. Refer to the Location Hydraulic Study Report for the hydraulic survey requirements.

A section corner survey will be necessary, since we anticipate the acquisition for R/W acquisition at Site 2. A soils survey is not needed since the surfacing will not be designed for specific structural values.

Traffic Control

Traffic will be maintained on a temporary detour during the construction of the new Site 1 bridge. The traffic control plan will be reviewed during the project development. All signing, flagging, etc. will be in accordance with MUTCD. Traffic will be maintained on the existing bridge during the construction of the new bridge at Site 2.

Salvage

Salvage all usable timber stringers and decking from the existing bridges for Wibaux County.

Public Involvement

A draft news release will be submitted. The county commissioners have agreed that a public informational meeting should not be needed, because the project will have such limited impacts. We will coordinate with Wibaux County during the development of the project.

No groups having unique needs or specific concerns have been identified.

Cost Estimate

The preliminary cost estimate for this project is given below.

Bridge Work	$336,000.
Road Work	400,000.
Remove Structure	8000.
Subtotal	**$744,000.**
Inflation (3 years at 3%)	67,000.
Construction Engineering (15%)	122,000.
Contingencies (10%)	93,000.
Total	**$1,026,000.**

The estimate is based on a lump sum estimate for road work and two 25 m long, 8.4 m wide bridges at $800 per square meter. The estimated cost of the roadway items includes detour and mobilization. No allowance was included for right of way and utilities.

Project Management

The Bridge Bureau will manage this project.

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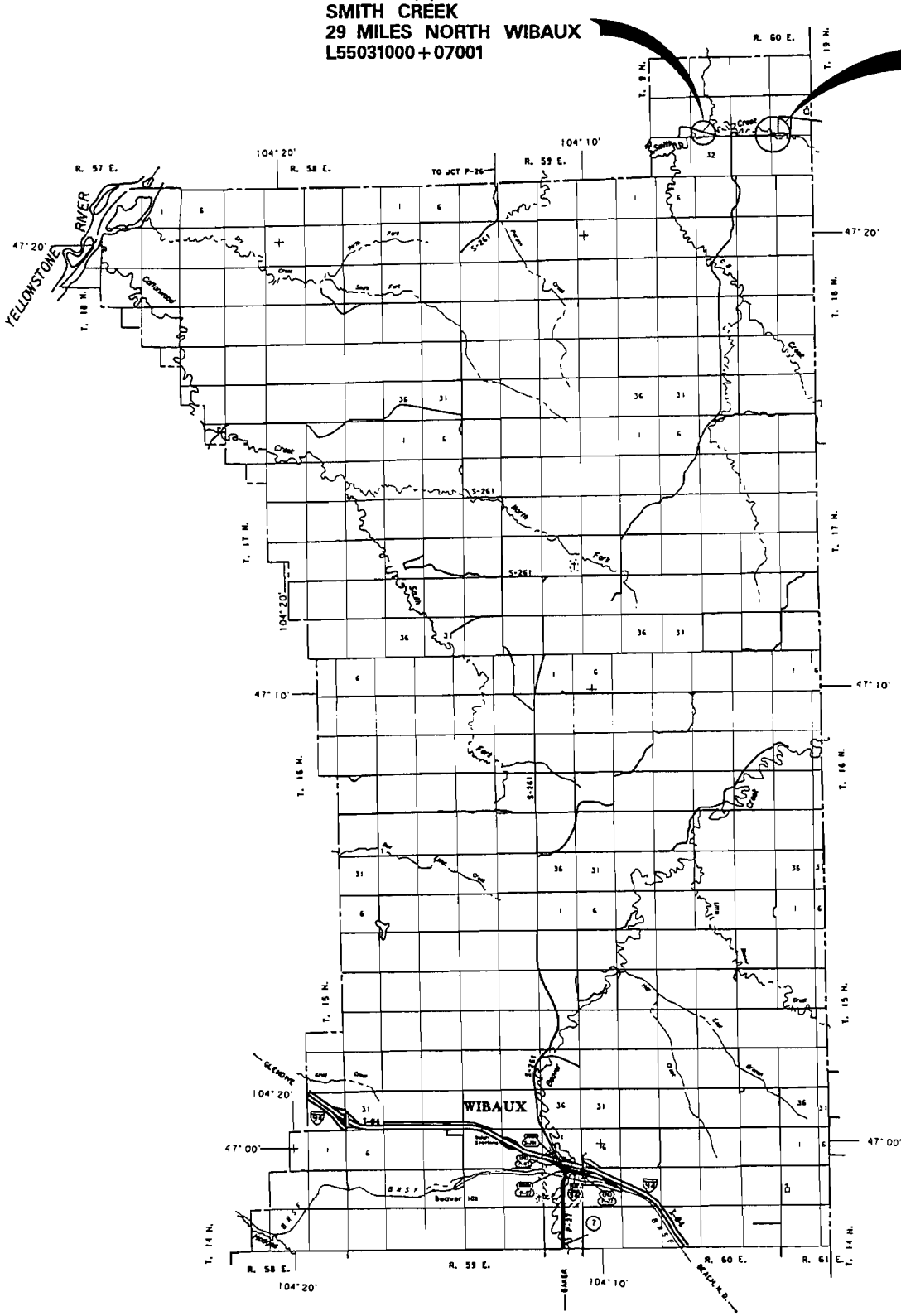
BR 9055 (9)
SMITH CREEK
29 MILES NORTH WIBAUX
L55031000+07001

BR 9055 (9)
SMITH CREEK
29 MILES NORTH WIBAUX
L55025015+09001



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WIBAUX COUNTY