



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

August 9, 2005

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

AUG 17 2005

Subject: BR 213-1(14)10
Rocky Coulee - NW of Santa Rita
5123

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

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 (1/10/05) 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).

Table with 4 columns: YES, NO, N/A, UNK. Rows include project impact questions and construction permit requirements.

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
5. There are parks, recreational, or other properties acquired/improved under <i>Section 6(f)</i> of the <i>1965 National Land &amp; Water Conservation Fund Act (16 USC 460L, et seq.)</i> on or adjacent to proposed the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such <i>Section 6(f)</i> sites would be documented and compensated with the appropriate agencies. (e.g.: MDFWP, local entities, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 <i>Section 106</i> of the <i>National Historic Preservation Act (16 USC 470, et seq.)</i> by the State Historic Preservation Office (SHPO), which would be affected by this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under <i>Section 4(f)</i> of the <i>1966 US DEPARTMENT OF TRANSPORTATION Act (49 USC 303)</i> on or adjacent to the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. This proposed project requires a full (i.e.: DRAFT & FINAL) <i>Section 4(f)</i> Evaluation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. The activity would involve work in a streambed, wetland, and/or other waterbody(ies) considered as "waters of the United States" or similar (e.g.: "state waters").	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Conditions set forth in <i>Section 10</i> of the <i>Rivers and Harbors Act (33 USC 403)</i> and/or <i>Section 404</i> under <u>33 CFR Parts 320-330</u> of the <i>Clean Water Act (33 USC 1251-1376)</i> would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A 124SPA Stream Protection permit would be obtained from the MDFWP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Tribal Water Permit would be required.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

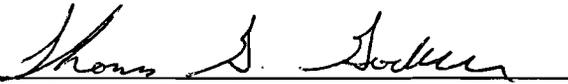
	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
The designated National Wild & Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In accordance with <i>Section 7 of the Wild and Scenic Rivers Act (16 USC 1271 – 1287)</i> , this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or US Bureau of Land Management (Missouri River).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. This is a "Type I" action as defined under <u>23 CFR 772.5(h)</u> , 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. If yes, are there potential noise impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A Noise Analysis would be completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. There would be compliance with the provisions of both <u>23 CFR 772</u> for FHWA's Noise Impact analyses and MDT's Noise Policy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. There would be substantial changes in access control involved with this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, would they result in extensive economic and/or social impacts on the affected locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interference to local events( e.g.: festivals) would be minimized to all possible extent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Substantial controversy associated with this pending action would be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

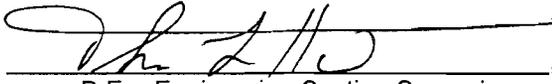
	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G. The Montana Pollutant Discharge Elimination System's conditions ( <u>ARM 16.20.1314</u> ), including temporary erosion control features for construction would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Documentation of an "invasive species" review to comply with both EO #13112 and the <i>County Noxious Weed Control Act</i> (7-22-21, MCA), including directions as specified by the county(ies) wherein its intended work would be done.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the proposed work would affect Important Farmlands, then an AD-1006 Farmland Conversion Impact Rating form would be completed in accordance with the <i>Farmland Protection Policy Act</i> ( <b>7 USC 4201</b> , <i>et seq.</i> ).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Features for the <i>Americans with Disabilities Act</i> (PL 101-336) compliance would be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L. A written Public Involvement Plan, would be completed in accordance with MDT's Public Involvement Handbook.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This proposed project complies with the <i>Clean Air Act's Section 176(c)</i> ( <b>42 USC 7521(a)</b> , as amended) under the provisions of <u>40 CFR 81.327</u> as it's either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is <u>not</u> covered under the EPA's September 15, 1997 Final Rule on air quality conformity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Is this proposed project in a "Class I Air Shed" (Indian Reservations) under <u>40 CFR 52.1382(c)(3)</u> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. There are recorded occurrences, and/or critical habitat in this proposed project's vicinity.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Would this proposed project result in a " <u>jeopardy</u> " opinion (under <u>50 CFR 402</u> ) from the Fish & Wildlife Service on any Federally listed T/E Species?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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: 8/9/05  
Tom Gocksch P.E. – Environmental Area Engineer  
MDT Environmental Services Bureau

Concur  , Date: 8/9/05  
Tom Hansen, P.E. - Engineering Section Supervisor  
Environmental Services Bureau

Concur  , Date: 8/10/05  
Federal Highway Administration

TLH:tgg: S:\PROJECTS\GREAT-FALLS\5123\5123ENCED001.DOC

Attachments

cc: Michael P. Johnson - District Administrator-Great Falls  
Paul R. Ferry, P.E. - Highway Engineer  
John H. Horton - MDT Right-of-Way Bureau Chief  
Suzy Althof - MDT Contract Plans Section Supervisor  
David W. Jensen, Supervisor - MDT Fiscal Programming Section  
Jean A. Riley, P.E., Chief - Environmental Services Bureau  
Tom Gocksch P.E. – Environmental Services Bureau  
✓ Environmental Quality Council

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

**Preliminary Field Review Report**  
**BR 213-1(14)10**  
**Rocky Coulee – NW of Santa Rita**  
**Control No. 5123**  
**Project Work Type 221**

**Introduction**

A preliminary field review for the project was held on October 20, 2004. The following personnel participated in this review:

Steve Prinzing	DESS	Great Falls
Christie McOmber	Assistant DESS	Great Falls
Jere Stoner	Road Design	Helena
Kevin McCray	Bridge Bureau	Helena
Dustin Rouse	Hydraulics Unit	Helena
Dan Maze	Bridge Bureau	Helena
Gerry Brown	Construction Eng. Services	Lewistown
Don Parsons	MDT Field Crew	Cut Bank
Wayne Noem	Planning	Helena
Ray Salois	Commissioner	Glacier County
Bill Bandel	Road Department	Glacier County
Tom Johnson	Road Department	Glacier County
Jerry Swenson	Road Department	Glacier County

**Proposed Scope of Work**

The proposed project was nominated to replace the existing single span steel and timber structure over Rocky Coulee. The bridge is located on Secondary Highway 213 approximately five miles northwest of Santa Rita. The existing bridge will be replaced with a single span, prestressed concrete structure located on the existing alignment. The vertical alignment will need to be raised slightly to meet current design standards.

This bridge was originally included in the STPS 213-1(11)7, Jct. S. 214 – Northwest project. Due to the limited scope of that pavement preservation project, the District decided to nominate this bridge replacement as a separate project.

Bridge replacement, rather than rehabilitation, is proposed due to the age and condition of the structure.

**Project Location and Limits**

The proposed project is located on Secondary Route 213, approximately 5 miles northwest of Santa Rita where it crosses Rocky Coulee (See the attached map.) The structure rests in Glacier County in Section 34, T. 35 N., and R. 6 W. at reference post 10.437. Reference posting begins at Secondary 213's junction with US Highway 2 in Cut Bank and increases to the north. The route is functionally classified as a Major Collector.

The project is located within the Blackfeet Indian Reservation. The limits of the project will be based on the minimum required approach lengths to tie the new bridge to the existing roadway. The project will extend from approximately RP 10.3 to RP 10.6.

**Physical Characteristics**

The existing bridge is a single-span steel girder structure, 51 feet long with a curb-to-curb width of 27 feet. The bridge was built in 1938 and has no bridge rails, only timber curbs. The current sufficiency rating is 59.0.

The existing structure is currently listed as Not Deficient. The structure was Structurally Deficient and Eligible for Rehabilitation prior to recent repairs on the deck made by Glacier County and therefore is still eligible for Bridge Replacement funding.

Numerous cracks exist in ' overlaid PMS bridge deck surface. The ber decking is still deteriorating. The steel giruers and cross-frames are rusty throughout. The left side of Abutment No. 1 is cracked under the two outside girders. Scour has undermined the footings of both abutments.

Rehabilitation is not being considered due to concrete deck weight vs. the existing timber and the condition of the abutments. The bridge is approaching 67 years of age and is near the end of its useful life.

The cost of rehabilitation of the existing structure is estimated at \$207,000. This is \$2000 more than the estimate for a new structure. In order to not overload the existing substructure a new steel superstructure is required, which is lighter, but more expensive than the prestressed concrete beams proposed for the new bridge. The existing steel superstructure probably wouldn't support a concrete deck, has some extremely poor weld details and cannot be re-used. The existing abutments would need to be widened and built-up with new piling as they are undermined and their method of support (pile or spread footing) is unknown. No plans are available for the existing structure.

Rehabilitation would not improve the existing substandard vertical alignment. Design exceptions would be required for maximum grade and stopping sight distance.

The terrain at the crossing is rolling and the adjacent land use is primarily grazing coexisting with oil and gas wells. The existing surfacing is bituminous surfacing of unknown depth, and the approach roadway width is approximately 26 feet. The existing inslopes appear to be 2:1. Following is information on the existing structure:

Year Built	1938
Inventory Number	S00 213 010 + 0.437-1
Length	51'-0"
Width (curb to curb)	27'-2"
Number of Spans	1
Span Lengths	50'-0"
Bridge Rail Type	None
Superstructure Type	Steel Stringer and Timber Deck
Substructure Type	Concrete Vertical Abutment
Sufficiency Rating	59.0
Structure Status	* Not Deficient

\* Inspection dated Jan. 10, 2002 stated eligible for rehabilitation. Temporary fix to deck made by County improved structure status.



Rocky Coulee – Northwest of Santa Rita

### Traffic Data

2004 ADT =	200 Present
2007 ADT =	210 Letting Date
2027 ADT =	260 Design (Future)
DHV =	40
Com Trucks =	5.5%
18 Kip ESALs =	7
Growth Rate =	1.0%

### Accident History

State Secondary 213 by reference point 10.437 had no recorded crashes between the dates July 1, 1994 and June 31, 2004.

### Major Design Features

Functional Classification – This roadway is functionally classified as a Major Collector.

Design Speed - The terrain adjacent to the project is generally level, however, the roadway within the project has characteristics of rolling terrain as it crosses Rocky Coulee. As a minimum, the design speed for the project will be 50 miles per hour based on the design criteria for a Rural Collector Road (Secondary System) in rolling terrain. Attempts will be made to exceed the 50 miles per hour design speed criteria where feasible.

Horizontal Alignment – The new structure will be built on the existing horizontal alignment. The long tangent at this location does not promote building to either side, as two “S” curves would be required to tie back to the PTW.

The length of bridge approaches will be determined based on the horizontal connection to the PTW or the required grade raise for the new structure. The total length of the project is expected to be approximately 0.3 mile.

Vertical Alignment – The existing bridge is located within a 500 ft sag vertical curve, which provides desirable stopping sight distance (SSD) at 35 miles per hour. It is anticipated that the roadway elevation will be raised at the new bridge in order to provide a longer sag vertical curve that meets standard SSD for the design speed.

According to as-built plans, the approach grade-in of the existing sag vertical curve is  $-4.50\%$  and the grade-out is  $+5.54\%$ . Both grades are below the maximum for a major collector in rolling terrain.

Typical Sections – The new structure width will be 28 feet rail to rail. The approach roadway finished surface will be 28 feet wide to match the structure width and will transition to match the existing

roadway width at the project limits. We will strive for utilizing standard practices and cut/fill slopes. This includes 6:1 surfacing inslopes, 6:1 ditch inslopes (10 ft. wide), and 20:1 ditch slopes (10 ft wide). Since the Design Standards allow deviations from these for low traffic volumes (DHSV<200), minor modifications may be considered to fit the sight.

Grading – Grading for this project will be accomplished with Embankment-In-Place. Due to a raise in grade and standard fill slopes, off site borrow may be required.

Hydraulics – Glacier County does not regulate the Rocky Coulee floodplain and a county floodplain development permit will not be required for the transverse floodplain encroachment. Channel modifications are not anticipated other than riprap placement beneath the new structure. Construction activities in and around flowing water are anticipated including riprap placement. Current design and construction specifications will minimize any water quality impacts. The Glacier County Water Resources Survey indicates no irrigation impacts will be encountered as part of this project. For additional information, see the Location Hydraulic Study Report.

### Design Exceptions

No design exceptions are currently anticipated for this project. The need for design exceptions will be further evaluated as design progresses.

### Right of Way

The as-built plans indicate that the existing right-of-way width is 50 ft. each side of centerline. It will be necessary for the Right-of-Way Bureau to verify and plot the existing right-of-way on the strip map. The project may require new right of way and will need a construction permit for the detour.

### Traffic and Safety

This project will involve new delineation and pavement markings. Hazard panels at the bridge ends were the only existing signs noted.

### Utilities/Railroad

Fiber optic and high-pressure gas pipeline warning signs were observed in the project area. A full utility topog is requested on the Field Survey Request. This project will have no railroad involvement.

### Environmental Considerations

Environmental Services will prepare the appropriate environmental evaluation and documentation for the project. No apparent significant environmental impacts or issues have been identified at this time. A programmatic categorical exclusion is anticipated.

### Stream Access

There is currently no existing public access or parking, particularly at the ends of the bridge. No changes in public access or parking are anticipated as a requirement of this project.

*Will need a cultural resource survey - Swallow provision needed, SPA & 404 permits, minor wetland impacts (see Ex (d)), 404 permit per 12/23/03 BR Report*

### Traffic Control

Traffic will be maintained with an on-site detour during construction. It appeared a downstream location is preferred due to a sharp drop off on the upstream side. Appropriate signing and flagging will be maintained in accordance with the Manual on Uniform Traffic Control Devices.

### Survey Requirements

A conventional survey is requested for this project. A survey request is attached to this report.

### Salvage

The existing timber stringers will be offered to State Maintenance forces. Any remaining salvageable timber stringers will be offered to the Department of Fish Wildlife and Parks. The contractor will dispose of any unwanted materials.

## Public Involvement

Level B public involvement is recommended. This would include a news release to the appropriate newspapers explaining the project, contacts with local governments, interest groups and adjacent landowners and an opportunity for an informational meeting. The County agreed this level of public involvement would be adequate.

## Other Projects

This bridge crossing was located within the recently completed STPS 213-1(11)7, Jct. S-213 – Northwest project. That project was a preventative maintenance overlay.

## Ready Date

A firm ready date has not been set. OPX-2 indicates a ready date of September 2008. This will be adjusted after completion of overrides and availability of funding is established.

## Project Management

The Bridge Bureau will manage the preconstruction phase of this project.

## Cost Estimate

The current cost estimate for the project is **\$750,000**, which includes 15% for mobilization, 10% for contingencies, 15% for construction engineering and a 3% annual inflation rate for three years. PE costs are not included. The bridge cost is based on a unit cost of \$90 per square foot. Construction cost from Road Design for the road approaches is estimated at \$175,000.

Cost breakdown is as follows:

New Bridge	205,000	
New Approach Roadways	175,000	(Road Design Est.)
Remove Existing Bridge	10,000	
Detour	<u>80,000</u>	
Subtotal	\$470,000	
+10% Contingencies	\$517,000	
+15% Mobilization	\$595,000	
+15% Construction Engr.	\$685,000	
+ 3 yrs. Inflation	<b>Total =</b>	<b>\$750,000</b>

# SURVEY REQUEST

Project No.: BR 213-1(14)10 \_\_\_\_\_  
 Date of Review: 10-20-04  
 Proposed Letting Date: September 2008  
 Control No.: 5123

Project Name: Rocky Coulee – NW of Santa Rita \_\_\_\_\_  
 Design Assignment: \_\_\_\_\_  
 Work Type: 221

Contact Person (Helena): Kevin McCray  
 Lead Agency (Br., Rd., etc.): Bridge

**FIELD SURVEY TO PROVIDE:**

Comments: \_\_\_\_\_

**CONTROL SURVEY**

Level Datum Selection:

- Assumed
- As-built
- NAVD 1988

Horizontal Datum (x,y)

- 1) State Plane Coordinates (requires GPS control survey)
- 2) Local Datum (i.e., 10,000 10,000)

Basis of Bearing:  Solar  As-built  Other \_\_\_\_\_

Comments: \_\_\_\_\_

- 1) **Digital Terrain Model/XYZ Survey** (Includes Geopak mapping requirements: ground shots, spot elevs., break lines, planimetric features, strip map, inverts, etc.)

Specify corridor width: 600 ft

Comments: 300 ft LT and RT, 1000 ft off each end of the existing bridge. Profile the roadway centerline 1500 ft each way from the bridge.

- 2) **Alignment/Cross Sections** (Special request; independent of DTM, staked, cross section interval and offsets, etc.)

Comments: \_\_\_\_\_

- 3) **Utilities**

Locate all utilities by: Dept. Forces  S.U.E. Forces

Comments/Exceptions: \_\_\_\_\_

Other non-utility underground information that should be provided by S.U.E.

Comments: \_\_\_\_\_

Strip map with closed traverse and vertical control information will be available for S.U.E. by \_\_\_\_\_

<u>Utility/Other</u>	<u>Location</u>	<u>Survey Requirements</u> (depth/height)
Gas	<u>south side of roadway</u>	_____
Water	_____	_____
Power	_____	_____
Sanitary Sewer	_____	_____
Fiber Optics	<u>south side of roadway</u>	_____
_____	_____	_____

**NOTE:** Please obtain any other utility not specifically identified above.

Control No.: 5123

- 4) **Existing Culvert Survey** ( xyz, size, length, invert, type, end section, cleaning requirements, etc. for all culverts.)
- 5) **Supplement to Photo Mapping** (Field check photogrammetric mapping, check cross sections, map editing, underground utilities, etc. pick up items.)  
Pg. 5-24, Survey Manual

**RIGHT-OF-WAY TIES:**

Extent of existing R/W monumentation visible, comments: \_\_\_\_\_

- Tie Project BOP & EOP (With as-built stations)
- ROW, Property & Section Corners (Identified by R/W after PFR)

(R/W will supply the specific requests for which entities to tie; this will take approximately 30-45 days after PFR.)

Comments: \_\_\_\_\_

- SOIL SURVEY** (Includes corrosive soil report, pipe condition, R-values.)
- Topsoil Report

### *Special Hydraulic Considerations*

(Refer to Chapter 10, Survey Manual)

Contact Person: Contact Dustin Rouse-- See LHSR

**I. WATERWAYS**

**Existing Bridge Site Survey**       yes     no

Location: See forthcoming LHSR

Hyd-1: Section required - 1   2   3   4   5   6   7   8   all

River Cross-Sections - location & width: \_\_\_\_\_

DTM Mapping [extent, intervals]: (Strip map containing planimetric features, spot elevations, break lines, etc. for use in Geopak)

Include topog. of existing (piers, abutments, low beam elev., etc.) \_\_\_\_\_

Comments: \_\_\_\_\_

**Existing Large Culvert Site Survey**       yes     no

(Hyd-1 not required when photo mapping is available.)

Location: \_\_\_\_\_

length     invert elevations

Hyd-1: Section required - 1   2   3   4   5   6   7   8   all

Comments: \_\_\_\_\_

Control No.: 5123 \_\_\_\_\_

II. IRRIGATION SURVEY:  yes  no

Location: \_\_\_\_\_

length  invert elevations

Hyd-1: Section required 1 2 3 4 5 6 7 8 all

Comments: \_\_\_\_\_

III. URBAN SURVEY:  yes  no

Location: \_\_\_\_\_

**Supplemental DTM Mapping** (Strip map containing planimetric features, spot elevations, break lines, threshold elevs., width of corridor, etc. for use in Geopak.)

Comments: \_\_\_\_\_

Storm Drain Outfall/Location: \_\_\_\_\_

Comments: \_\_\_\_\_

IV. ADDITIONAL HYDRAULIC SURVEY REQUIREMENTS:

\_\_\_\_\_

**Standard Disclaimer:** Not all portions required on a typical survey can be included in this document. Typical users of this form should use judgement in determining any additional or extraordinary information required to fulfill the intent of this document. The Survey Manual should be used in conjunction with work types, project types and this form to portray a complete survey.

Project No.: BR 213-1(14)10

Project Name: Rocky Coulee – NW of Santa Rita

Date of Review: 10-20-04

Work Type: 221

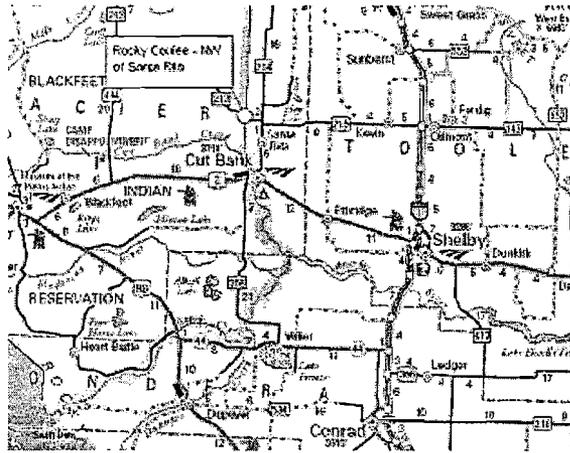
Control No.: 5123

### *Special Wetland Considerations*

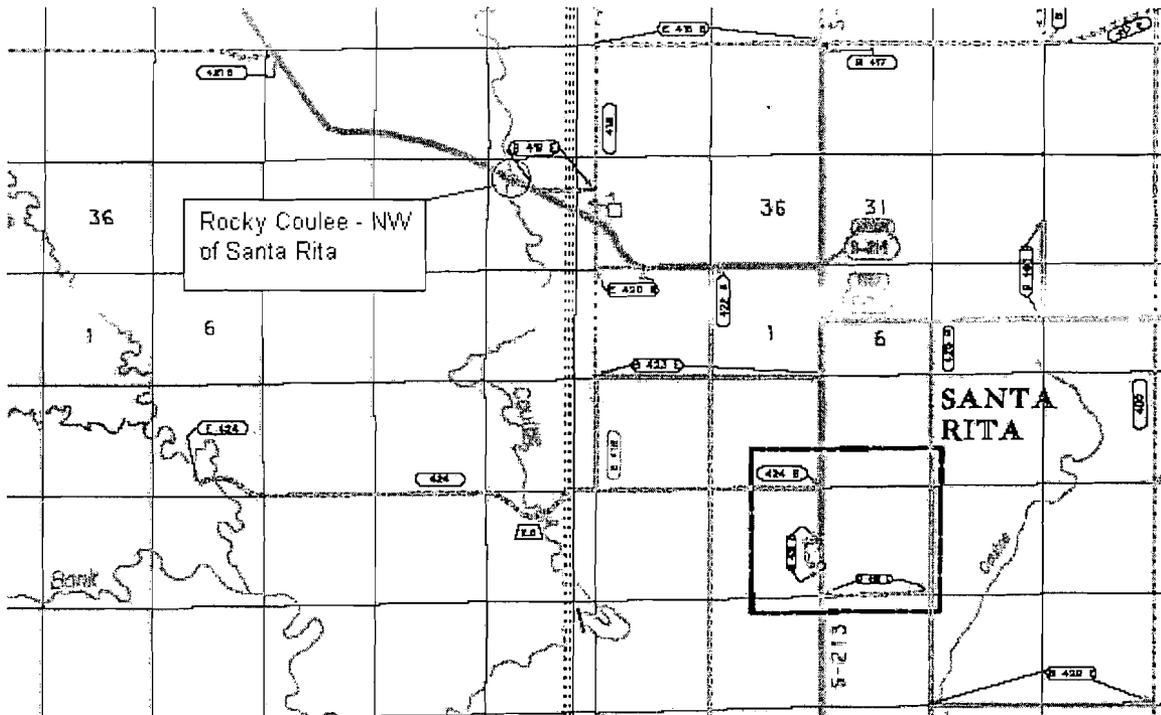
Contact Person in Environmental: Bob Effinger

**NOTE:** This request area for STAND ALONE WETLAND MITIGATION projects ONLY.  
Please complete Aerial/Field Survey portions as appropriate.

Comments: \_\_\_\_\_



Location Map



Local Map