



PROJECT PROSPECTUS

Part 1 — Project Request (Page 1 of 2)

Key Number:

Jurisdiction:

Section:

NORTH POWDER RIVER (ELLIS LANE) BRIDGE #10755

Region:

Area:

District:

5

NEACT AREA

13

State Highway No.:

Highway Name:

Mile Point

Length: (mi) (km)

From: 4.48 To: 4.56

.08

Urban
 Rural

City:

MPO:

Wabiu

Yes
 No

UGB

County:

UNION

Road/Street Name:

ELLIS LANE

Route No.:

NHS

YES
 NO

HPMS:

FC:

Applicant (if other than State):

UNION COUNTY

US Congressional District:

2

State Senate District:

29

State Representative District:

57

Cost Estimates (x \$ 1,000)

Project Components

Right Of Way

Preliminary Engineering

\$98

Grading

X

Files

(#)

2

Right Of Way

\$15

Paving

X

Hectares

(#)

1

Utility Reimbursement

Structures

X

Relocations

(#)

Signing

Acquisitions

(#)

Roadway

\$45

Signals

Easements

(#)

Structures

\$258

Illumination

Work By: State / Consultant / Applicant

Signals

\$0

Preliminary Engineering (S,C,A)

C

Illumination

\$0

Construction Engineering (S,C,A)

C

Temp. Protection

\$10

Right of Way Descriptions (S,C,A)

C

Const. Contingencies

\$65

Right Of Way Acquisitions (S,C,A)

C

Const. Engineering

\$59

Project Categories

Constructed By

Remove Exist Bridge

\$23

Environmental Class (1, 2, 3, PCE) 2

Other

\$26

Design Category (1-7) 7

Contract

County Force

Total CE and Construction:

\$487

Work Type Code (1-13) 5

State Force

Other

Total Estimate:

\$ 601

Primary STIP Work Type:

City Force

Consultant

Recommended Let Date By Federal Fiscal Year (Quarter-Year):

PE Fund:

R/W Fund:

UR Fund:

CE-CN Fund:

PE EA:

R/W EA:

UR EA:

CE-CN EA:

Item	Existing	Proposed	Define The Problem:
Travel Lanes (#)	2	2	North Powder River (Ellis Lane) Bridge #10755 has a sufficiency rating of 49.1. Bridge inspection reports document heavy cracking with efflorescence along edges and into slab bottoms as well as moderate scaling on slabs, on both the upstream and downstream sides. Inspection reports also note ice abrasion on the piling in bents 2 and 3, embankment settlement which has led to exposure of piling in both abutments, scaling on all concrete rail components, and transverse AC cracking. The combination of these conditions, the load rating, and the ADT, makes this bridge undesirable and unsafe for two-way residential, agricultural and recreational traffic.
Structures (#)	1	1	
Signals (#)			
Bike Way (#)	N	N	
Average Daily Traffic	192	297	
Year of ADT	2000	219	
Throughway Y/N			
			Describe Proposed Solution: - Attach Sketch Map
			The proposed improvement project consists of replacement of North Powder River (Ellis Lane) Bridge #10755 with a 70 FOOT single span by 32 foot wide prestressed slab structure, installation of guardrail to meet standards, and widening approaches to accommodate new bridge width.

Prepared By:

Date:

OTC Approval Date:

Program Year:

Funding Amount:

X

3/2009



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Key Number:

Jurisdiction:

Section: NORTH POWDER RIVER (ELLIS LANE) BRIDGE #10755

Region:
5

Area:
NEACT AREA

District:
13

Project Justification

This concrete structure was originally constructed in 1947 and serves as a residential, agricultural, and recreational route. Bridge inspection reports document heavy cracking with efflorescence along edges and into slab bottoms as well as moderate scaling on slabs, on both the upstream and downstream sides. Inspection reports also note ice abrasion on the piling in bents 2 and 3, embankment settlement which has led to exposure of piling in both abutments, scaling on all concrete rail components, and transverse AC cracking. The combination of these conditions, the load rating, and the ADT, makes this bridge undesirable and unsafe for two-way residential, agricultural and recreational traffic. Due to the aforementioned conditions, Union County has requested the North Powder River (Ellis Lane) Bridge #10755 be submitted for replacement under the OTIA III Program. This project is consistent with the Department of Transportation's and Union County's goal of replacing or rehabilitating deficient structures. North Powder River (Ellis Lane) Bridge #10755 is located within Section 31, T6S, R39E, W. M.

Additional Information For Project Requested By Local Jurisdictions

Responsible Local Office To Be Contacted For The Following Activities:

- | | | |
|--|----------------|---------------|
| 1. Public Hearing /
Citizen Involvement | _____ (Office) | _____ (Phone) |
| 2. Environmental / Planning | _____ (Office) | _____ (Phone) |
| 3. Pre-Engineering | _____ (Office) | _____ (Phone) |

This Official Request is From:

City of: _____ and/or _____ UNION County

By: _____ By: RICHARD COMSTOCK, PUBLIC WORKS DIRECTOR

By: _____ By: _____

By: _____ By: _____

Applicable Intergovernmental Agreements:

IGA Number:	Jurisdiction Name:	Agreement Date:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Administrative Recommendation

Bridge Prospectus Cost Estimate

Applicant:	UNION COUNTY	NBIS	Bridge No.	
Project / Section	NORTH POWDER RIVER (ELLIS LANE) BRIDGE #10755	Region:	5	Area: NEACT AREA
				District: 13

New Bridge / Roadway Configuration:		Existing Bridge:	
Left Side Rail	110 feet	Bridge Length	62 feet
Left Sidewalk	feet	Bridge Width	31 feet
Shoulder	4 feet	Area	1922 square ft.
Lane 2	feet	New AC Top Width	32 feet
Lane 1	12 feet	New AC Depth	4 inches
---CL---	feet	New Base Depth	12 inches
Lane 1	12 feet	Project Length	410 feet
Lane 2	feet	Net Road Work Length	340 feet
Shoulder	4 feet	X-S Side Slope	3:1
Right Sidewalk	feet	AC Avg Width	feet
Right Side Rail	110 feet	Base Avg Width	feet
Bridge Length	70 feet	Asphalt Density	pounds/ cu ft
Bridge Width	32 feet	Base Density	pounds/ cu ft
New Area	2240 square ft.	New AC Received	272 tons
		New Base Required	798 tons

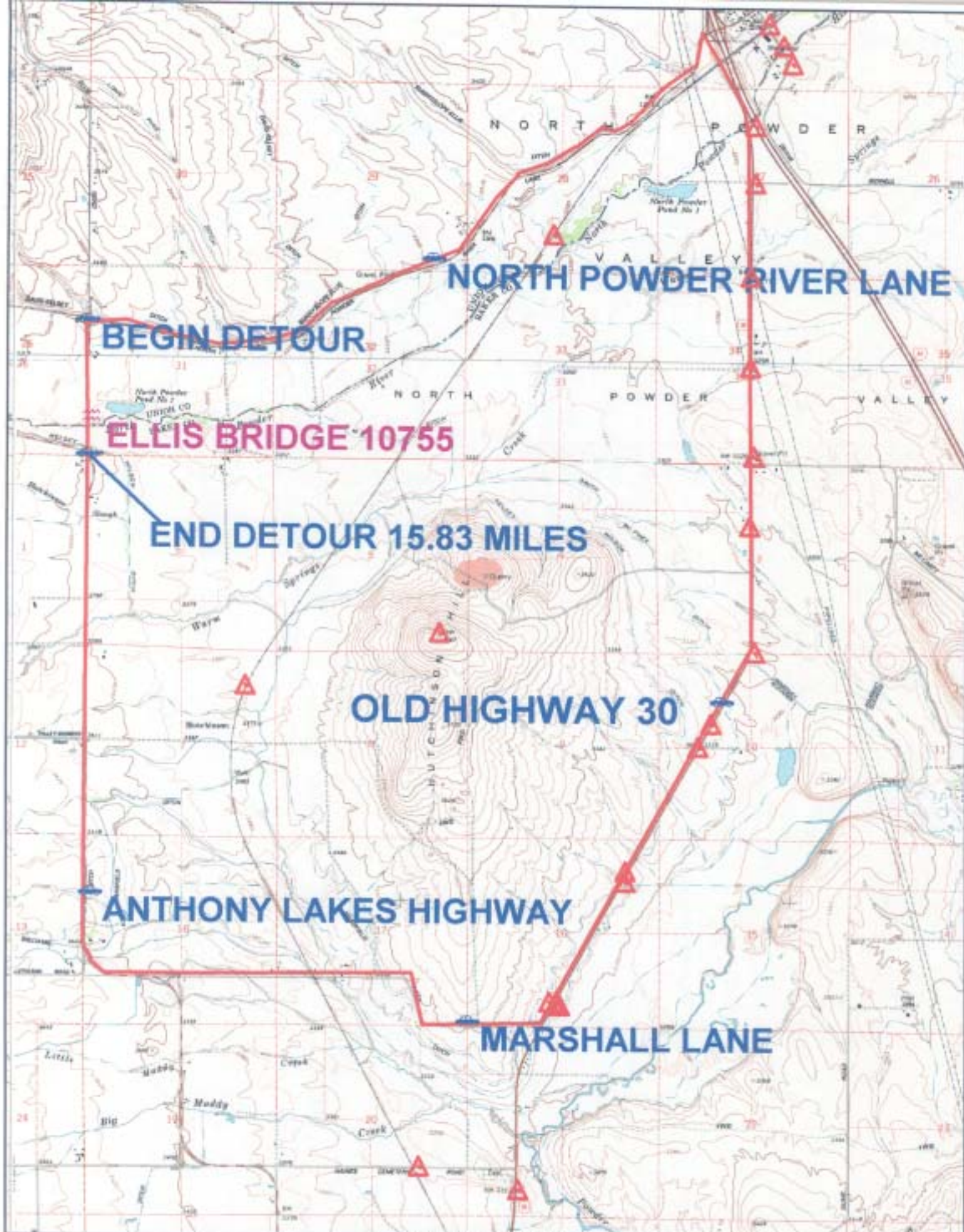
COST ESTIMATE:	Quantity	Unit	Price per unit	Cost (\$x1000s)
Right-of-Way	1.00	Acre	\$ 15,000	\$15
==Roadway==				
Clear & Grub	\$ 2,000	lump sum		\$2
Erosion Control	\$ 1,000	lump sum		\$1
General Excavation	200	cubic yards	\$ 10.00	\$2
Embankment in Place	150	cubic yards	\$ 20.00	\$3
Pavement Removal		square feet		\$0
Aggregate Base	798	tons	\$ 12.00	\$10
Asphalt Concrete	272	tons	\$ 36.00	\$10
Curb		feet		\$0
Sidewalk		feet		\$0
Riprap		cubic yards		\$0
Guardrail, Type 2A	150	feet	\$ 20.00	\$3
Guardrail, Type 3	50	feet	\$ 40.00	\$2
Guardrail Trans	4	each	\$ 1,700.00	\$7
Other		specify unit		\$0
Other		specify unit		\$0
Other		lump sum		\$0
Other		lump sum		\$0
Flared Terminals	4	each	\$ 1,800.00	\$7
Subtotal Roadway				\$46
Structures	2,240	square feet	\$ 115.00	\$258
Bridge Rail		feet		\$0
Remove Existing Bridge	1,922	square feet	\$ 12.00	\$23
Other		specify unit		\$0
Other		specify unit		\$0
Other		lump sum		\$0
Other		lump sum		\$0
Subtotal Structures				\$281

Bridge Prospectus Cost Estimate

Applicant: Project / Section	UNION COUNTY NORTH POWDER RIVER (ELLIS LANE) BRIDGE #10755	NBIS Bridge No. Region: 5	Area: NEACT AREA	District: 13
Mobilization	8	percent of (Roadway + Structure)		\$26
Signals		lump sum		\$0
Illumination		lump sum		\$0
Temporary Protection	\$ 10,000	lump sum		\$10
Detour Route		feet		\$0
Other		specify unit		\$0
Other		specify unit		\$0
Other		lump sum		\$0
Other		lump sum		\$0
			Mobilization & Traffic	\$36
			Subtotal Construction	\$363
==Engineering==				
Construction Engineering	18	percent of (Roadway + Structure)		\$59
Contingency	20	percent of (Roadway + Structure)		\$65
			Subtotal Const. Eng.	\$124
Preliminary Engineering				
Consultant	28	percent of (Roadway + Structure)		\$92
State		percent of (Roadway + Structure)		\$0
County	2	percent of (Roadway + Structure)		\$7
			Subtotal PE	\$98
			Total Estimate	\$601

Bridge Project Prospectus Additional Bridge Information

Applicant: UNION COUNTY		NBIS Bridge Number: 0					
Project Name / Section: NORTH POWDER RIVER (ELLIS LANE) BRIDGE #10755		Region: 5	Area: NEACT AREA				
			District: 13				
Funding Preferred Source: <input checked="" type="checkbox"/> OTIA III <input type="checkbox"/> Federal HBRR Acceptable Source: <input checked="" type="checkbox"/> OTIA III <input checked="" type="checkbox"/> Federal HBRR	Heavy Vehicle Usage <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Existing</td> <td style="text-align: center;">Proposed</td> </tr> <tr> <td>Truck AADT: <input style="width: 50px; text-align: center;" type="text" value="10"/></td> <td><input style="width: 50px; text-align: center;" type="text" value="15"/></td> </tr> </table> Fire Truck Usage: <input type="checkbox"/> YES, at least 25% of trips use bridge. <input checked="" type="checkbox"/> No. Less than 25% of trips	Existing	Proposed	Truck AADT: <input style="width: 50px; text-align: center;" type="text" value="10"/>	<input style="width: 50px; text-align: center;" type="text" value="15"/>	Detour Detour Route: Length: <input style="width: 50px; text-align: center;" type="text" value="15.83"/> Map: (Please attach map)	
Existing	Proposed						
Truck AADT: <input style="width: 50px; text-align: center;" type="text" value="10"/>	<input style="width: 50px; text-align: center;" type="text" value="15"/>						
Regional Freight Corridor Analysis: No posted bridges on detour or freight corridor. SEE DETOUR/CORRIDOR MAP							
Special Consideration:							



BEGIN DETOUR

NORTH POWDER RIVER LANE

ELLIS BRIDGE 10755

END DETOUR 15.83 MILES

OLD HIGHWAY 30

ANTHONY LAKES HIGHWAY

MARSHALL LANE

**NORTH POWDER RIVER (ELLIS LANE)
UNION COUNTY
BRIDGE 10755**



SOUTH END



WEST ELEVATION

**NORTH POWDER RIVER (ELLIS LANE)
UNION COUNTY
BRIDGE 10755**



**COLUMN UPSTREAM SIDE
SOUTH OF MID SPAN**