

Special Bridge Repairs - 2009-11 Biennium - Eastern Region

(Sorted by Priority#)

Bridge Number:	Bridge Name:	BMS Description:	Repair Description:	Region:	2009-11 Priority#:	Bridge\$'s:	Total\$'s:
002/606	DEEP CR	Concrete Sidewalk	Remove and replace the concrete sidewalk.	EA	1		\$507,555
002/606	DEEP CR	Concrete Bridge Rail	Remove and replace the concrete bridge rails.	EA	1		
090/540N	HANGMAN CR	Concrete Box Girder	Remove loose concrete, clean rusty steel and apply a patching material and sealer.	EA	36	\$150,000	\$300,000
090/540S	HANGMAN CR	Concrete Box Girder	Remove loose concrete, clean rusty steel and apply a patching material and sealer.	EA	37	\$150,000	\$300,000
290/004.7E-E	3RD AVE & E-E RAMP OC	Concrete Box	Remove delaminated concrete, clean rusty steel and apply new patching material.	EA	58		
195/024	S FK PALOUSE R CT HOUSE	Concrete Girder		EA	65		
090/545E-E	FOURTH-E RAMP	Concrete Abutment	Remove delaminated concrete, clean rusty rebar and apply new patching material.	EA	72	\$200,000	\$300,000
090/540S	HANGMAN CR	Concrete Abutment	A phase 2 soils investigation and engineering study is recommended by the HQ Materials Lab to determine if the bridge piers are rotating causing the expansion joints to close.	EA	79	\$100,000	\$100,000
002/601	STEVENS CR UPPER X-ING	Concrete Bridge Rail	Replace deteriorated concrete balluster rail	EA	91	\$25,000	\$50,000
021/321	W FK SAN POIL	Concrete Bridge Rail	Replace the deteriorated concrete bridge rails.	EA	94	\$50,000	\$100,000
021/323	SAN POIL R	Concrete Bridge Rail	Replace the deteriorated concrete bridge rails.	EA	95	\$50,000	\$100,000
026/002SP	N FK PALOUSE-WEST WYE	Concrete Bridge Rail	Replace the deteriorated concrete bridge rails.	EA	96	\$50,000	\$100,000
090/332	I-90 OC, TOKIO RD	Steel Sliding Exp Joint	Replace Expansion Joints	EA	97	\$80,000	\$160,000
195/027	N FK PALOUSE R	Concrete Bridge Railing	Remove the concrete baluster bridge rails and replace with a new Thrie Beam rail.	EA	98	\$96,000	\$200,000
14 Repairs				Sum of Bridge \$'s =		\$951,000	\$2,217,555

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002/606	DEEP CR	Concrete Sidewalk	Remove and replace the concrete sidewalk.	EA	1		\$507,555
002/606	DEEP CR	Concrete Bridge Rail	Remove and replace the concrete bridge rails.	EA	1		
021/321	W FK SAN POIL	Concrete Bridge Rail	Replace the deteriorated concrete bridge rails.	EA	94	\$50,000	\$100,000
021/323	SAN POIL R	Concrete Bridge Rail	Replace the deteriorated concrete bridge rails.	EA	95	\$50,000	\$100,000
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290/004.7E-E	3RD AVE & E-E RAMP OC	Concrete Box	Remove delaminated concrete, clean rusty steel and apply new patching material.	EA	58		
14 Repairs				Sum of Bridge \$'s =		\$951,000	\$2,217,555

Bridge Number: 2 / 606	Structure ID 0002701A	Bridge Name: DEEP CR	Milepost: 272.41	Region: Eastern
Year Built / YR Widened: 1941	Bridge Type: CTB	Bridge Length: 180 ft	Bridge Width (curb-curb): 26.0 ft	Sufficiency Rating: 62.67 FO
Average Daily Traffic: 5,714	Truck% 10%	Detour (miles) 5	Num of Lanes: 2	
Date Inspected: 9/19/2006	Structr Adequacy: 5	Superstr Code: 6	Safe Load: 5	
Substr Code: 5	Scour: 5			
BMS Element Num: 266	BMS Element Descr: Concrete Sidewalk			
BMS Element Quantity: 180 Feet				
Project Number: 6002271	2009-11 Priority#: 1			
Repair Year: 2008	2007-09 Priority#: 23			
CPMS Ad Date: 3/24/2008	Bridge \$'s:			
	Repair Total\$'s: \$507,555			



Repair Description:

Remove and replace the concrete sidewalk.

COMMENTS

The concrete in the sidewalk is deteriorated and reinforcing steel is exposed at the curbline. The sidewalk needs to be replaced along with the concrete balluster bridge rails.

The details for the concrete bridge rail and sidewalk replacement should be similar to those used on bridge 153/20 (contract 6315) in 2002 and on other SR 153 bridges (contract 7229) in 2007.

This work is scheduled to be done by contract in 2008.

Bridge Number: 2 / 606	Structure ID 0002701A	Bridge Name: DEEP CR	Milepost: 272.41	Region: Eastern
Year Built / YR Widened: 1941	Bridge Type: CTB	Bridge Length: 180 ft	Bridge Width (curb-curb): 26.0 ft	Sufficiency Rating: 62.67 FO
Average Daily Traffic: 5,714	Truck% 10%	Detour (miles) 5	Num of Lanes: 2	
Date Inspected: 9/19/2006	Superstr Code: 6	Substr Code: 5	Structr Adequacy: 5	Safe Load: 5
BMS Element Num: 331		BMS Element Descr: Concrete Bridge Rail		
BMS Element Quantity: 360 Feet				
Project Number: 6002271	2009-11 Priority#: 1	2007-09 Priority#: 22	Bridge \$'s: Repair Total\$'s:	
Repair Year: 2008	CPMS Ad Date: 3/24/2008			



Repair Description:

Remove and replace the concrete bridge rails.

COMMENTS

The concrete bridge rails are deteriorated with exposed reinforcing steel. The bridge rails need to be replaced with a new Thrie Beam and steel H-Posts.

The details for the concrete bridge rail and sidewalk replacement should be similar to those used on bridge 153/20 (contract 6315) in 2002 and on other SR 153 bridges (contract 7229) in 2007.

This work is scheduled to be done by contract in 2008.

Bridge Number: 90 / 540N	Structure ID 0006579B	Bridge Name: HANGMAN CR	Milepost: 279.49	Region: Eastern
Year Built / YR Widened: 1963	Bridge Type: CBOX	Bridge Length: 1,222 ft	Bridge Width (curb-curb): 44.0 ft	Sufficiency Rating: 67.56
Average Daily Traffic: 24,152	Truck% 13%	Detour (miles) 2	Num of Lanes: 3	
Date Inspected: 9/21/2005	Superstr Code: 6	Substr Code: 5	Structr Adequacy: 5	Safe Load: 5
BMS Element Num: 105		BMS Element Descr: Concrete Box Girder		
BMS Element Quantity: 2				
Project Number:	2009-11 Priority#:	36		
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s:	\$150,000		
	Repair Total\$'s:	\$300,000		



Repair Description:

Remove loose concrete, clean rusty steel and apply a patching material and sealer.

COMMENTS

The strip seal expansion joints over the interior hinges were replaced in 1999. Shortly after the expansion joints were replaced the gap in the hinged area closed.

Use assumed costs of \$150,000 and \$300,000 until better estimates are developed.

Bridge Number: 90 / 540S	Structure ID 0006579B	Bridge Name: HANGMAN CR	Milepost: 279.49	Region: Eastern
Year Built / YR Widened: 1963	Bridge Type: CBOX	Bridge Length: 1,222 ft	Bridge Width (curb-curb): 44.0 ft	Sufficiency Rating: 67.56
Average Daily Traffic: 24,152	Truck% 13%	Detour (miles) 2	Num of Lanes: 3	
Date Inspected: 9/21/2005	Structr Adequacy: 5	Superstr Code: 6	Safe Load: 5	
Substr Code: 5	Scour: 7			
BMS Element Num: 105	BMS Element Descr: Concrete Box Girder			
BMS Element Quantity: 2				
Project Number:	2009-11 Priority#:	37		
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s:	\$150,000		
	Repair Total\$'s:	\$300,000		



Repair Description:

Remove loose concrete, clean rusty steel and apply a patching material and sealer.

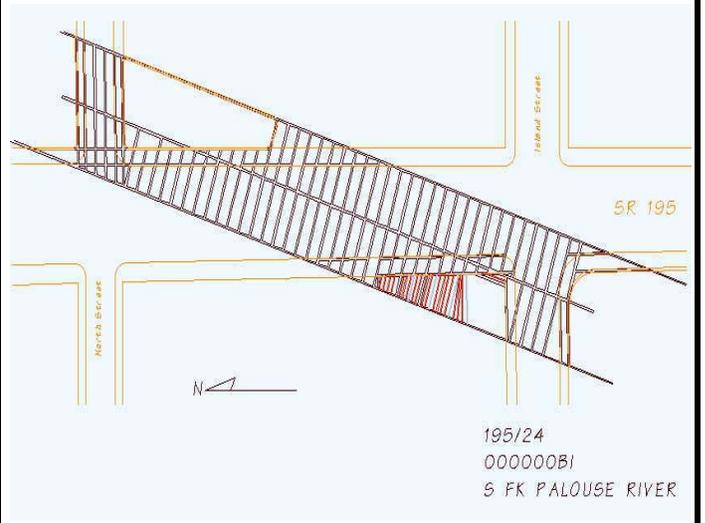
COMMENTS

The strip seal expansion joints over the interior hinges were replaced in 1999. Shortly after the expansion joints were replaced the gap in the hinged area closed.

Use assumed costs of \$150,000 and \$300,000 until better estimates are developed.

Bridge Number: 290 / 4.7E-W		Structure ID 0008774C		Bridge Name: 3RD AVE & E-E RAMP OC		Milepost: 1.18		Region: Eastern	
Year Built / YR Widened: 1971		Bridge Type: CBox		Bridge Length: 518 ft		Bridge Width (curb-curb): 38.0 ft		Sufficiency Rating: 87.02	
Average Daily Traffic: 9,000		Truck% 		Detour (miles) 		Num of Lanes: 2			
Date Inspected: 9/25/2006		Structr Adequacy: 5		Superstr Code: 5		Safe Load: 5			
Substr Code: 6		Scour: N		BMS Element Num: 105		BMS Element Descr: Concrete Box			
BMS Element Quantity: 10		Project Number:		2009-11 Priority#: 58		Repair Year:			
CPMS Ad Date:		2007-09 Priority#:		Bridge \$'s:		Repair Total\$'s:			
									
Repair Description: Remove delaminated concrete, clean rusty steel and apply new patching material.									
COMMENTS									

Bridge Number: 195 / 24	Structure ID 000000BI	Bridge Name: S FK PALOUSE R CT HOUSE	Milepost: 38.09	Region: Eastern
Year Built / YR Widened: 1923	Bridge Type: CTB	Bridge Length: 228 ft	Bridge Width (curb-curb): 56.0 ft	Sufficiency Rating: 31.00 FO
Average Daily Traffic: 11,386	Truck% 	Detour (miles) 0	Num of Lanes: 4	
Date Inspected: 10/25/2006	Structr Adequacy: 3	Superstr Code: 5	Safe Load: 5	
Substr Code: 6	Scour: 8			
BMS Element Num: 110 BMS Element Descr: Concrete Girder BMS Element Quantity: 2,000				
Project Number:	2009-11 Priority#:	65		
Repair Year:	2007-09 Priority#:	118		
CPMS Ad Date:	Bridge \$'s:			
	Repair Total\$'s:			



Repair Description:

COMMENTS

Active corrosion spalling in the bottom flange of the girders.

Bridge Number: 90 / 545E-E		Structure ID 0008322D		Bridge Name: FOURTH-E RAMP		Milepost: 280.54		Region: Eastern		
Year Built / YR Widened: 1967		Bridge Type: CBox		Bridge Length: 79 ft		Bridge Width (curb-curb): 25.0 ft		Sufficiency Rating: 96.57		
Average Daily Traffic: 4,590		Truck% 5%	Detour (miles) 2		Num of Lanes: 1					
Date Inspected: 8/24/2005		Structr Adequacy: 6		Superstr Code: 6		Safe Load: 5				
Substr Code: 6		Scour: N		BMS Element Num: 215		BMS Element Descr: Concrete Abutment				
BMS Element Quantity: 25		Project Number:		2009-11 Priority#: 72		Repair Year:				2007-09 Priority#:
CPMS Ad Date:		Bridge \$'s: \$200,000		Repair Total\$'s: \$300,000						
										
<p>Repair Description: Remove delaminated concrete, clean rusty rebar and apply new patching material.</p>										
<p>COMMENTS</p>										

Bridge Number: 90 / 540S	Structure ID 0006579B	Bridge Name: HANGMAN CR	Milepost: 279.49	Region: Eastern
Year Built / YR Widened: 1963	Bridge Type: CBOX	Bridge Length: 1,222 ft	Bridge Width (curb-curb): 44.0 ft	Sufficiency Rating: 67.56
Average Daily Traffic: 24,152	Truck% 13%	Detour (miles) 2	Num of Lanes: 3	
Date Inspected: 9/21/2005	Structr Adequacy: 5	Superstr Code: 6	Safe Load: 5	
Substr Code: 5	Scour: 7			
BMS Element Num: 215	BMS Element Descr: Concrete Abutment			
BMS Element Quantity: 2				
Project Number:	2009-11 Priority#:	79		
Repair Year:	2007-09 Priority#:	6		
CPMS Ad Date:	Bridge \$'s:	\$100,000		
	Repair Total\$'s:	\$100,000		



Repair Description:

A phase 2 soils investigation and engineering study is recommended by the HQ Materials Lab to determine if the bridge piers are rotating causing the expansion joints to close.

COMMENTS

The strip seal expansion joints over the interior hinges were replaced in 1999. Shortly after the expansion joints were replaced the gap in the hinged area closed. A geotechnical investigation is in progress to determine where movement in the bridge is occurring to cause the hinged joints to close.

Bridge Number: 2 / 601	Structure ID 0003168A	Bridge Name: STEVENS CR UPPER X-ING	Milepost: 267.23	Region: Eastern
Year Built / YR Widened: 1946	Bridge Type: CS	Bridge Length: 23 ft	Bridge Width (curb-curb): 36.0 ft	Sufficiency Rating: 91.06
Average Daily Traffic: 6,105	Truck% 10%	Detour (miles) 3	Num of Lanes: 2	
Date Inspected: 8/9/2006	Superstr Code: 6	Substr Code: 6	Structr Adequacy: 6	Safe Load: 5
			Scour: 8	
BMS Element Num: 331	BMS Element Descr: Concrete Bridge Rail			
BMS Element Quantity: 46				
Project Number:	2009-11 Priority#:	91		
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s:	\$25,000		
	Repair Total\$'s:	\$50,000		



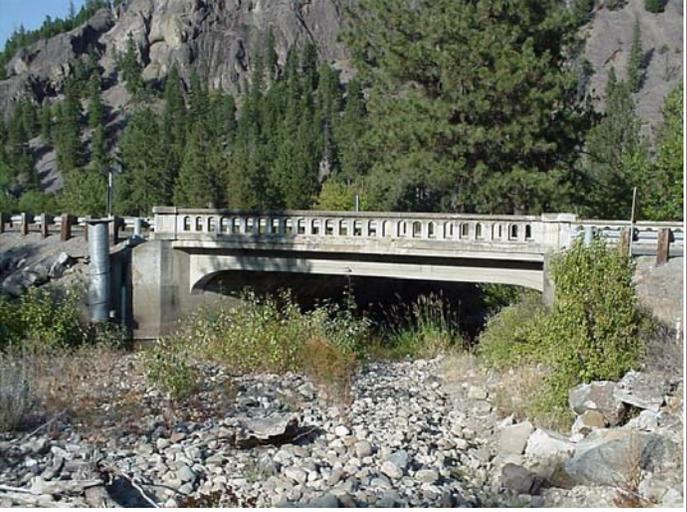
Repair Description:

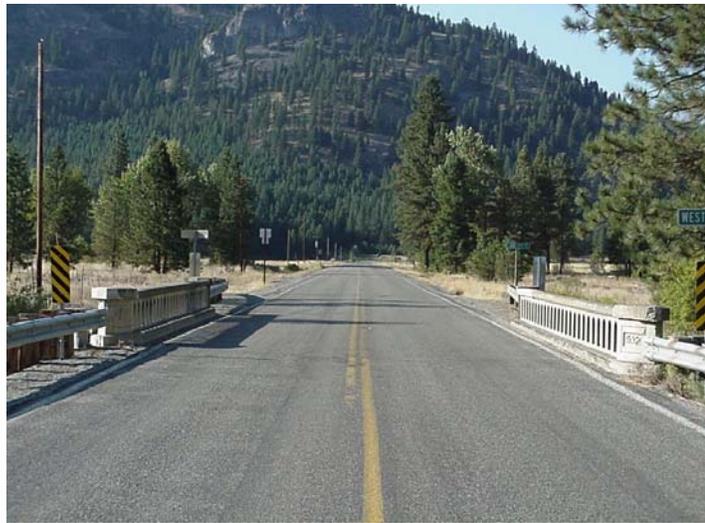
Replace deteriorated concrete balluster rail

COMMENTS

The concrete bridge rails are deteriorated with exposed reinforcing steel. The bridge rails need to be replaced with a new Thrie Beam and steel H-Posts.

The costs and details for the concrete bridge rail replacement should be similar to those used on SR 153 bridges (contract 7229) in 2007.

Bridge Number: 21 / 321	Structure ID 0001622A	Bridge Name: W FK SAN POIL	Milepost: 145.62	Region: Eastern
Year Built / YR Widened: 1932	Bridge Type: CTB	Bridge Length: 42 ft	Bridge Width (curb-curb): 24.0 ft	Sufficiency Rating: 73.32
Average Daily Traffic: 207	Truck% 8%	Detour (miles) 97	Num of Lanes: 2	
Date Inspected: 9/12/2006	Structr Adequacy: 6	Superstr Code: 7	Safe Load: 5	
Substr Code: 6	Scour: 3			
BMS Element Num: 331	BMS Element Descr: Concrete Bridge Rail			
BMS Element Quantity: 84				
Project Number:	2009-11 Priority#:	94		
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s:	\$50,000		
	Repair Total\$'s:	\$100,000		



No Photo Available

Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

Bridge Number: 21 / 323	Structure ID 000000HN	Bridge Name: SAN POIL R	Milepost: 148.45	Region: Eastern
Year Built / YR Widened: 1927	Bridge Type: CTB	Bridge Length: 61 ft	Bridge Width (curb-curb): 20.4 ft	Sufficiency Rating: 4.98 SD
Average Daily Traffic: 643	Truck% 7%	Detour (miles) 97	Num of Lanes: 2	
Date Inspected: 9/13/2006	Structr Adequacy: 3	Superstr Code: 7	Safe Load: 5	
Substr Code: 3	Scour: 3			
BMS Element Num: 331	BMS Element Descr: Concrete Bridge Rail			
BMS Element Quantity: 122				
Project Number:	2009-11 Priority#: 95			
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s: \$50,000			
	Repair Total\$'s: \$100,000			
		<p>No Photo Available</p>		
<p>Repair Description: Replace the deteriorated concrete bridge rails.</p>				
<p>COMMENTS</p>				

Bridge Number: 26 / 2SP	Structure ID 0002385B	Bridge Name: N FK PALOUSE-WEST WYE	Milepost: 38.50	Region: Eastern
Year Built / YR Widened: 1938	Bridge Type: CTB	Bridge Length: 114 ft	Bridge Width (curb-curb): 26.0 ft	Sufficiency Rating: 61.45 FO
Average Daily Traffic: 9,105	Truck% 9%	Detour (miles) 0	Num of Lanes: 2	
Date Inspected: 10/24/2006	Structr Adequacy: 5	Superstr Code: 6	Safe Load: 5	
Substr Code: 6	Scour: 8			
BMS Element Num: 331	BMS Element Descr: Concrete Bridge Rail			
BMS Element Quantity: 228 Feet				
Project Number:	2009-11 Priority#:	96		
Repair Year:	2007-09 Priority#:	39		
CPMS Ad Date:	Bridge \$'s:	\$50,000		
	Repair Total\$'s:	\$100,000		



Repair Description:

Replace the deteriorated concrete bridge rails.

COMMENTS

The concrete bridge rail is deteriorated.

Bridge Number: 90 / 332	Structure ID 0005783D	Bridge Name: I-90 OC, TOKIO RD	Milepost: 231.23	Region: Eastern
Year Built / YR Widened: 1958	Bridge Type: PCG	Bridge Length: 225 ft	Bridge Width (curb-curb): 26.0 ft	Sufficiency Rating: 96.15
Average Daily Traffic: 250	Truck% 25%	Detour (miles) 8	Num of Lanes: 2	
Date Inspected: 9/26/2006	Structr Adequacy: 6	Superstr Code: 6	Safe Load: 5	
Substr Code: 6	Scour: N			
BMS Element Num: 409	BMS Element Descr: Steel Sliding Exp Joint			
BMS Element Quantity: 160				
Project Number:	2009-11 Priority#:	97		
Repair Year:	2007-09 Priority#:			
CPMS Ad Date:	Bridge \$'s:	\$80,000		
	Repair Total\$'s:	\$160,000		
				
Repair Description: Replace Expansion Joints				
COMMENTS				
Bridge Item cost based on \$500 / ft. Total project cost based on \$1,000 / ft.				

Bridge Number: 195 / 27	Structure ID 0001542A	Bridge Name: N FK PALOUSE R	Milepost: 38.50	Region: Eastern
Year Built / YR Widened: 1931	Bridge Type: CTB	Bridge Length: 240 ft	Bridge Width (curb-curb): 26.0 ft	Sufficiency Rating: 69.15 FO
Average Daily Traffic: 9,105	Truck% 9%	Detour (miles) 13	Num of Lanes: 2	
Date Inspected: 10/26/2006	Structr Adequacy: 6	Superstr Code: 6	Safe Load: 5	
Substr Code: 6	Scour: 8			
BMS Element Num: 331	BMS Element Descr: Concrete Bridge Railing			
BMS Element Quantity: 480 LF				
Project Number:	2009-11 Priority#:	98		
Repair Year:	2007-09 Priority#:	40		
CPMS Ad Date:	Bridge \$'s:	\$96,000		
	Repair Total\$'s:	\$200,000		



Repair Description:

Remove the concrete baluster bridge rails and replace with a new Thrie Beam rail.

COMMENTS

The existing concrete rail is cracked and deteriorated.

Bridge Item \$ estimate based on \$200 per ft , Total Project \$ estimate based on \$400 per ft.