

Bridge Inspection										
Bridge File Number	81351 -1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1990/1990				Lot No.	2				
Bridge or Town Name	VERMILION				Inspector Name	Jason Saly				
Located Over	41:20 R1 1.691;41:20 L1 1.693				Inspector Class	BR CLS A				
Located On	MUNICIPAL				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	28-Nov-2012				
Legal Land Location	SE SEC 31 TWP 50 RGE 6 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-110:51:32, 53:21:10				Data Entry Date	15-Jan-2013				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA15				Review Date	14-Dec-2012				
Clear Roadway/Skew	10 /				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	650 / 2011 (E)				Dept. Review Date	17-Jan-2013				
Road Classification	RLU-208-110				Follow-Up By					
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 28		Semi	CS2 49		Train	CS3 62		----> On Critical Spans ---->Critical Member
Design Loading:	CS750									----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 41 L1 5.4m, 41 R1 5.4m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	NB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.3	In Advance (Y/N)	Yes
Remarks		Advance signs located at 75m on SB lane & 120m on NB lane. NB attached to RR bridge.										
Required Load Posting (t)		Single				Semi				Truck Train		
Posted Loading (t)		Single				Semi				Truck Train		
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks												

Hazard Marker At Bridge (Y/N)	No											
Remarks												
Other Sign Types												

Utilities (Located at)											
Utility Attachments											
Telephone					Gas						
Power	9 wire O/H crosses 10m East of c/l.				Municipal		Street lighting.				
Others	CNR railway overpass 25m to South.				Problem (Y/N)		No				
Remarks		In center of Town of Vermilion, utilities present, conduit under c/l. Not in use.									

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		7	7	Local urban traffic to cross over Hwy 41 below, curves both directions.	
Vertical Alignment		8	8	Adjacent CNR overpass is file 79442.	
Roadway Width (m)		9.400		Width varies significantly due to tapers and street widens further away. Curb & gutter.	
Approach Bump		7	7		
Guardrail (Y/N)		Yes		(Missing 1 transition bolt at SW. 16Aug2009).	
Guardrail		N	5	Ends are snow covered.	
Length (m)		19.000			
Current Standard (Y/N)		Yes			
Termination Type		Turned Down			
Drainage		N	N	Snow covered.	
Approach Road General Rating		7	7		

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : CBC, 2 Spans, Lengths(m): 22-22, A-Ident Number:)						
Special Features						
Special Feature			X	Concrete Stairs. Beside wingwall @ SE & SW.		
(Type :)						
Special Feature			X	Concrete Retaining Wall. Sidewalk in G/S under bridge.		
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	100	0	0	0	Snow covered.	
Now	100.0	0.0	0.0	0.0		
Wearing Surface			N	N		
(Material Type : ACP)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			N	3	Gland general covered in dirt & snow. 300mm tear in gland of E abut jnt.	
Temperature (deg. C)		-13				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
90		West abutment				
83		East abutment				
Deck Drainage			4	4	No deck drains except for weep tubes under ACP in both gutters. 12 weep tubes broken off @ both ends.	
Drains Clogged (Y/N)		No				
Curbs/Median			N	N	(Plow scrapes. Leakage through curb. 16Aug2009). Vertical cracks on curb exterior at all bridgerail post locations. 1% aggregate spalls. Snow covered.	
(Curb Type : Standard)						
Scaling (Percent Area)		1				
Bridge Rail			7	7	Missing bolts on 3 post/cap connections; missing 1 bolt @ each of two posts in S side & 2 bolts in 1 post (NE) in N side. Could not view base plates or hardware.	
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts		4	N			
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating		7	7			
(Type : GALVANIZED)						
Sidewalk			N	N	(1245mm vertical slat railing system on sidewalk. Trans. cracks in concrete sidewalk. 16Aug2009) - Snow covered.	
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	1		
Now	0	0	0	1		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CBC, 2 Spans, Lengths(m): 22-22, A-Ident Number:)				
Girders		3	3	S2G10 patching failed. S1G11 & S2G11 both have high load damage chips, minor. S2G5-6,8-10 have up to 25mm deep high load damage. (No exposed steel but G10 has 1m long wide cracking @ bottom flange @ point of impact. 16Aug2009). Could not confirm crack, even with binoculars, but rating carried forward. Some girders have been patched.
Cracking (Y/N)	No			
Spalling (Percent Area)	1			
(Number Of Girders : 22)				
Diaphragms/Cross Frame		7	7	Cracks @ cast in place concrete @ diaphragm.
Bearings		8	8	
Temperature (deg. C)	-13			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	Buried
Paint/Coating		7	7	
Abutment Stability		7	7	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 2)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	Minor narrow map cracking in columns.
Paint/Coating		6	6	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		7	7	Tube rail guardrail with galvanized I-beam posts in median. Galvanized railing on top of retaining wall used for sidewalk, typical both sides.
Type	Guardrail			
Slope Protection		7	7	Cast-in-place concrete headslope slabs have moved up to 80mm E & 50mm W from breastwall.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		N	N	(Municipal storm sewers in outer lane gutters. 16Aug2009).
Grade Separation General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Replace missing post/cap bolts (4).					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2013	Seal curbs & sidewalk on regular cycle.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Replace broken weep tube drains (12).					
OTHER ACTION	2013	Repair or replace torn gland.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	61.3/61.3	Est. Repl. Yr	2034	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Assume girders repaired so no action since damage not seen. Low rating remains due to uncertainty concerning repair.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	28-Aug-2014		Previous Inspection Date	07-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							