

Bridge Inspection							
Bridge File Number	76350 -1 Bridge			Form Type	TH		
Year Built/Year Supstr	1927/1927			Lot No.	2		
Bridge or Town Name	RICINUS			Inspector Name	Owen Salava		
Located Over	CLEARWATER RIVER, 6.159, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	734:14 C1 19.145			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	30-Nov-2010		
Legal Land Location	SW SEC 4 TWP 35 RGE 9 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-115:14:22, 51:58:14			Data Entry Date	28-Feb-2011		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA18			Review Date	22-Feb-2011		
Clear Roadway/Skew	5 / 0 deg.			Dept. Reviewer Name	Chris Black		
AADT/Year	90 / 2009 (A)			Dept. Review Date	01-Mar-2011		
Road Classification	RCU-208G-90			Follow-Up By			
Detour Length (km)	50						
Allowable Load (t):	Single	H 29 FLOOR BEAM	Semi	HS 42 FLOOR BEAM	Train	CS3 47 U2U3	----> On Critical Spans ---->Critical Member
Design Loading:	HS20				----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)				Yes								
Posted:	Lane	NB	On Bridge (m)	4.6	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	4.6	In Advance (Y/N)	Yes
Remarks	Measured 4.81m											
Required Load Posting (t)				Single		Semi	42	Truck Train	47			
Posted Loading (t)				Single		Semi	42.0	Truck Train	47.0			
Posted:	Lane	NB	At Junction (Y/N)	Yes	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes				
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes				
Remarks	Obscured by vegetation.											
Hazard Marker At Bridge (Y/N)	Yes											
Remarks	HM set slightly higher than standard (400mm higher).											
Other Sign Types	Narrow bridge, should have "Stop if oncoming traffic" signs in advance, info											

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Road winds down steep hills into valley. Campground @ NW. Overgrown veg. blocking signage. Curve to S with limited sight distance.
Vertical Alignment		5	5	
Roadway Width (m)	9.000			Potential danger to public.
Approach Bump		5	5	
Guardrail (Y/N)	No			
Guardrail		X	X	
Length (m)				
Current Standard (Y/N)	No			
Termination Type	None			
Drainage		6	6	
Approach Road General Rating		5	5	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : TH, 1 Spans, Lengths(m): 61, A-Ident Number: A0075-19)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Snow covered.	
Last	5	0	0	4		
Now	100.0	0.0	0.0	0.0		
Wearing Surface/Deck Top				3	N	(Worn @ ends. 4% of planks rotten/worn to subdeck. 24Jun2010).
(Material Type : UNTREATED TIMBER)						
(Plank Thickness(mm) : 75)						
(Plank Width(mm) : 300)						
Deck Rideability			5	5		
Deck Joints			X	X		
Temperature (deg. C)		-5				
(Expansion Type :)						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
Curbs/Wheel Guards			4	N	(3 WG planks splintered. 10 blocks split/twisted. 24Jun2010). 100 x 300 x 450 TT blocks.	
(Curb Type : Standard)						
(Type : TREATED TIMBER)						
(Thickness(mm) : 100)						
(Width(mm) : 300)						
Bridge Rail			5	5	Dented at various locations but none broken.	
(Type : LATTICE)						
Bridge Rail Posts/Blocking			4	4	Truss members used as supports. (Missing 30% connections at btm rail to truss. 24Jun2010).	
(Type :)						
Bridge Rail/Posts Coating			4	4		
(Type : PAINT)					20% paint failure. Dirty. Blue	
Sidewalk			X	X		

Superstructure						
Bridge Component		Last		Now		Explanation of Condition
(Primary Span : TH, 1 Spans, Lengths(m): 61, A-Ident Number: A0075-19)						
Wide Load Damage (Y/N)	No					
High Load Damage (Y/N)	Yes					
Top Chord			7	7	1 open hole & 3 bullet holes.	
Batter Posts			7	7	Missing bolt at U4W.	
Sway Bracings			5	5	Lower top braces have high load damage.	
Diagonals			7	7	(Minor nick at 4/5 height to member U1I2E. 24Jun2010).	
Verticals			4	4	U9U9 has 25mm bend & 30x800mm dent.	
Portals			4	4	10 X 300 dent @ U8L8E. Near L8E. (Bullet holes in vertical U1L1W, U3L3W & U6L6E. 24Jun2010).	
Connections			5	5	(Headless rivets @ U1U2W, bolt missing U3U4W. 24Jun2010).	
Floor Beams			7	7	Minor bend to lower flange of L0L0 near L0E.	
Bottom Chord			4	4	L9L10W has 30mm overall bow & 12x300mm dent & L8L9E is bent & dented.	
(No. of Stringers : 130)						8 - stl 310 X 125; 5 - stl 260 X 115.
Stringer Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Stringers			7	7	Jammed against S backwall.	
(Type : STEEL)						
(Width(mm) : 125)						
(Depth(mm) : 310)						
(Spacing(mm) : 385)						
Paint Condition			4	4	Faded, 5% paint failure.	
(Colour Description : BLUE)						
(Colour Code : 15182)						
Touchup Required (Y/N)	No					
Bearings			5	5	L10W RN - 65mm Exp, twisted 13mm	
Temperature (deg. C)	-5				L10E RN - 25 Exp, twisted 14mm.	
(Expansion Type : ROLLER NEST BEARING)						
(Fixed Type : PINNED BEARING)						
Functioning (Y/N)	No				A1 at L10 S.	
A2 at L0 N.						
Sub Deck/Deck Underside			6	6	Wide split at ends, typical 5%.	
(Material Type : TREATED TIMBER)						
(Plank Thickness(mm) : 100)						
(Plank Width(mm) : 300)						
Defects (Percent Area)	1					
Span Alignment Problems						
Vertical (Y/N)	No					
Horizontal (Y/N)	No					
Superstructure General Rating			4	4		
Substructure						
Bridge Component		Last		Now		Explanation of Condition
Abutments						
(Extended Backwall Piles (Y/N) : Y)						
(Extended Backwall Piles Spacing(mm) : 900)						
2 - HP 310 x 94 corbels at each bearing on 2 300TT caps + 1 common 300TT cap, 14 total						
1 BW 300TT, 2 total.						
4 BP 300TT / bearing, 16 total						
9 BW 300TT / abut, 18 total						
2 Ext 300TT / abut, 4 total						
2 WW 300TT / abut, 4 total						

Substructure					
Bridge Component		Last	Now	Explanation of Condition	
(Total Number of Caps/Corbels : 7:7)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Bearing Seats/Caps/Corbels			6	6	
(Type : TREATED TIMBER)					
(Depth(mm) : 305)					
(Width(mm) : 305)					
Backwalls/Breastwalls			5	5	
Greatest Height (m)		2.80			
Wingwalls			6	6	
(Total Number of Bearing Piles : 8:8)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Piles			6	6	
Paint/Coating			X	X	
Abutment Stability			5	5	
Scour/Erosion			6	6	
Piers/Bents					
(Type :)					
(Total Number of Caps/Corbels :)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Bearing Seats/Caps/Corbels			X	X	
(Type :)					
(Total Number of Bearing Piles :)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Pier Shaft/Piles			X	X	
Greatest Height (m)					
Bracing/Struts/Sheathing			X	X	
Nose Plate			X	X	
Paint/Coating			X	X	
(Colour Description :)					
(Colour Code :)					
Pier Stability			X	X	
Scour			X	X	
Debris (Y/N)		No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible. (High water has been up to bottom of stringer during recent flood in 2005.) Large drift in stream.
Drift (Y/N)	Yes			
Slope Protection		7	7	
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		8	8	
Adequacy of Opening		5	5	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Install missing btm lattice connection bolts.					
RETROFIT BRIDGE RAIL							
SEAL CURBS	2011	Replace 10 WG blocks. Replace 3 sections.					
PATCH DECK	2011	Replace 4% planks 6.0m lg.					
SEAL DECK							
OVERLAY DECK							
REPLACE STRIP DECK							
REPLACE SUB DECK							
RESET/ PAINT BEARINGS	2011	Replace with neoprene pads, trim stringers to allow for movement.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS	2011	Heat straighten U8L8E, L9L10W, L8L9E, U9U9 & lower members on top braces.					
WASHING	2011	Clean deck and bearings.					
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	Cutback vegetation @ N + S row near bridge + along advance signs.					
OTHER ACTION	2011	Add bolts at U4W & to top angle of U4U4.					
OTHER ACTION	2011	Install guardrails at N + S approaches.					
OTHER ACTION	2011	Install "Stop if oncoming traffic" signs in advance.					
OTHER ACTION	2011	Drill and fill bullet holes with bolts.					
OTHER ACTION	2011	Grind nick smooth at U1L2E.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	42.4/42.4	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Photos from June 2010 UT included as additional attachment.			Department Comments			
Maintenance Reviewed By				Date	Estimated Total		0

Proposed Long-Term Strategy	2007.10.10 On Spot program for 2012.		
On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	Bryce Clayton
Next Inspection Date	28-Feb-2014	Previous Inspection Date	24-Jun-2010
Inspection Cycle (Default) (months)	39		
Comment			