

Bridge Inspection													
Bridge File Number	01274 -1 Bridge						Form Type	TH					
Year Built/Year Supstr	1908/1907						Lot No.	2					
Bridge or Town Name	DICKSON						Inspector Name	Jason Saly					
Located Over	RAVEN RIVER, 3.91, WATERCRS-ST						Inspector Class	BR CLS A					
Located On	766:08 C1 11.314						Assistant Name						
Water Body Cl./Year							Assistant Class						
Navigabil. Cl./Year							Inspection Date	15-Feb-2012					
Legal Land Location	NW SEC 28 TWP 35 RGE 3 W5M						Data Entry By	Marcia Chavez					
Longitude, Latitude	-114:22:56, 52:02:10						Data Entry Date	08-Mar-2012					
Road Authority	Alberta Transportation (AIT)						Reviewer Name	John O'Brien					
Contract Main. Area	CMA18						Review Date	29-Feb-2012					
Clear Roadway/Skew	4.3 /						Dept. Reviewer Name	Andrew Smikles					
AADT/Year	120 / 2010 (A)						Dept. Review Date	09-Mar-2012					
Road Classification	RLU-207G-60						Follow-Up By						
Detour Length (km)	6												
Allowable Load (t):	Single	H 21 STRINGER			Semi	HS 36 FLOOR BEAM			Train	CS3 41 L3L4		---> 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)	4.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	4.3	In Advance (Y/N)	Yes	
Remarks Measured 4.6. Damage on signs and cross-beam.													
Required Load Posting (t)			Single	21	Semi	36	Truck Train		42				
Posted Loading (t)			Single	21.0	Semi	36.0	Truck Train		42.0				
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)	Yes	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes					
Remarks South jct sign covered by trees.													
Hazard Marker At Bridge (Y/N)			Yes										
Remarks			Too high.										
Other Sign Types			One Lane Bridge.										
Utilities (Located at)													
Utility Attachments													
Telephone						Gas							
Power						Municipal							
Others						Problem (Y/N) No							
Remarks													
Approach Road													
				Last	Now	Explanation of Condition							
Horizontal Alignment				7	7	Farm approach to NW.							
Vertical Alignment				6	6								
Roadway Width (m)		6.800			Bump at S end of bridge.								
Approach Bump				4	4								
Guardrail (Y/N)		Yes			SW guardrail damaged by tree.								
Guardrail				3	4								
Length (m)		7.600			Insufficient posts and rail length.								
Current Standard (Y/N)		No											
Termination Type		TURNED DOWN											
Drainage				5	N	(Gravel windrows under rail, water drains away from bridge. 20Jul2009).							
Approach Road General Rating				6	6								

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : TH, 1 Spans, Lengths(m): 38.1, A-Ident Number: A0050-12)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	(Gravel on deck. 20Jul2009) - Snow covered.	
Last	10	0	0	0		
Now	100.0	0.0	0.0	0.0		
Wearing Surface/Deck Top			5	N	(Cracked/rotten planks, minor. 20Jul2009).	
(Material Type : UNTREATED TIMBER)						
(Plank Thickness(mm) : 75)						
(Plank Width(mm) : 300)						
Deck Rideability			5	5	(Minor unevenness due to patching. 20Jul2009).	
Deck Joints			X	X		
Temperature (deg. C)		24				
(Expansion Type :)						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
Curbs/Wheel Guards			4	4	6 damaged wheelguards. 14 damaged blocks. Improper washers on WG.	
(Curb Type : Standard)						
(Type : TREATED TIMBER)						
(Thickness(mm) : 100)						
(Width(mm) : 300)						
Bridge Rail			3	4	Double layer; 1 flexbeam section damaged, minor. Rail to post bolt broken or missing nuts. 16 flexbeam splice bolts missing. Blocks starting to break and rot.	
(Type : GALVANIZED STEEL FLEX BEAM)						
Bridge Rail Posts/Blocking			3	4		
(Type : UNTREATED TIMBER;UNTREATED TIMBER)						
Bridge Rail/Posts Coating			7	7		
(Type : GALVANIZED)						
Sidewalk			X	X		

Superstructure							
Bridge Component				Last	Now	Explanation of Condition	
(Primary Span : TH, 1 Spans, Lengths(m): 38.1, A-Ident Number: A0050-12)							
Wide Load Damage (Y/N)		Yes				Minor wide/high load damage. Minor nicks. U5L5W kinked above mid m2m5 brace (diagonal) which has 30mm bend. Gusset bent/bowed at L0W & L8W. Open hole but none at L8W gusset. Missed tie plate at LOE. No hanger bolts from lower bracing. L8L8 lacks mid-support.	
High Load Damage (Y/N)		Yes					
Top Chord				7	7		
Batter Posts				7	7		
Sway Bracings				4	4		
Diagonals				4	4		
Verticals				4	4		
Portals				6	6		
Connections				5	5		
Floor Beams				4	4		
Bottom Chord				7	7		
(No. of Stringers : 64)							
Stringer Detail Ratings							
		N (count)	1 (count)	2 (count)	3 (count)	8 stringers/8 bays.	
Last							
Now							
Stringers				6	6		
(Type : STEEL)							
(Width(mm) : 100)							
(Depth(mm) : 300)							
(Spacing(mm) : 633)							
Paint Condition				3	3	U6L6W not painted with minor rust & scaling. Orange.	
(Colour Description :)							
(Colour Code :)							
Touchup Required (Y/N)		Yes					
Bearings				4	N	(Jammed from abutment movement inward. Fully expanded at 25 degrees C. 20Jul2009) - Snow covered.	
Temperature (deg. C)		24					
(Expansion Type : ROLLER NEST BEARING)							
(Fixed Type : PINNED BEARING)							
Functioning (Y/N)		No					
Sub Deck/Deck Underside				6	6	Water stains.	
(Material Type : TREATED TIMBER)							
(Plank Thickness(mm) : 100)							
(Plank Width(mm) : 300)							
Defects (Percent Area)		0					
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) : 1500)							

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
(Total Number of Caps/Corbels : 8:8)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0	Cracks and loosing creosote at cut end front cap under SE bearing. Steel corbels. N abut cap minor twisting.	
Bearing Seats/Caps/Corbels			5	5		
(Type : TREATED TIMBER)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
Backwalls/Breastwalls			5	5	Planks bowing on S & N abut.	
Greatest Height (m)		2.70				
Wingwalls			5	5	SE WW leaning, minor.	
(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	Cracks and some sections lost.	
Piles			6	6		
Paint/Coating			X	X		
Abutment Stability			7	7		
Scour/Erosion			7	7		
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)		Square bridge on a 15 deg LHF stream.		
(D/S Direction : E)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Curb)	1.0			
Drift (Y/N)	Yes			
Slope Protection		5	5	Toe of S bank eroded under bridge but still ample fill before roadway threatened.
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Proposed Action			
Previous Inspector's Name	Paul Carter	Previous Assistant's Name	Garry Griffiths
Next Inspection Date	15-May-2015	Previous Inspection Date	20-Jul-2009
Inspection Cycle (Default) (months)	39		
Comment			

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace damaged blocks, 16 splice bolts, and replace missing/broken post bolts.	at next stripdeck replacement	2015			
RETROFIT BRIDGE RAIL							
SEAL CURBS	2015	Replace 6 planks, 14 blocks and upgrade to std. washers.	at next stripdeck replacement	2015			
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPLACE STRIP DECK							
REPLACE SUB DECK							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE	2015	Paint U6L6W at next strip deck.	at next stripdeck replacement	2015			
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Attach planks to wing piles.	at next stripdeck replacement	2015			
OTHER ACTION							
OTHER ACTION							
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) (%)	41.8/41.7	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes

Special Comments for Next Inspection		Department Comments	DA		
Maintenance Reviewed By	Darron Ahlstedt	Date	22-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy	2005.01.20 Bridge should be okay until 2027 with normal maintenance.				
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Paul Carter	Previous Assistant's Name	Garry Griffiths		
Next Inspection Date	15-May-2015	Previous Inspection Date	20-Jul-2009		
Inspection Cycle (Default) (months)	39				
Comment					