

Bridge Inspection										
Bridge File Number	00599 -1 Bridge					Form Type	TH			
Year Built/Year Supstr	1924/1924					Lot No.	1			
Bridge or Town Name	OKOTOKS					Inspector Name	Jason Rusu			
Located Over	HIGHWOOD RIVER, 2.13.27, WATERCRS-ST					Inspector Class	BR CLS A			
Located On	552:02 C1 12.453					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	02-Mar-2013			
Legal Land Location	NE SEC 16 TWP 21 RGE 28 W4M					Data Entry By	Lauren Korte			
Longitude, Latitude	-113:49:18, 50:47:02					Data Entry Date	22-Mar-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Garry Roberts			
Contract Main. Area	CMA27					Review Date	07-Mar-2013			
Clear Roadway/Skew	5 /					Dept. Reviewer Name	Tim Davies			
AADT/Year	3,300 / 2011 (A)					Dept. Review Date	25-Mar-2013			
Road Classification	RCU-209-110					Follow-Up By				
Detour Length (km)	26									
Allowable Load (t):	Single	H 27 STRINGER			Semi	HS 41 U2L3		Train	CS3 47	----> 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	EB	On Bridge (m)	4.6	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	4.6	In Advance (Y/N)	Yes
Remarks												
Required Load Posting (t)												
Posted Loading (t)												
Posted:	Lane	EB	At Junction (Y/N)	Yes	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes	At Bridge (Y/N)	Yes	At Bridge (Y/N)	Yes
Posted:	Lane	WB	At Junction (Y/N)	Yes	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes	At Bridge (Y/N)	No	At Bridge (Y/N)	No
Remarks Drove East past 3 intersections- Can't confirm WB @ junction.												
Hazard Marker At Bridge (Y/N) Yes												
Remarks												
Other Sign Types 65 km/hr. Narrow bridge, stop for oncoming traffic. NE lane.												

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	Connected to stringer South side.				Gas	120.0 m East.				
Power	22.0 m East of East abut.				Municipal					
Others	S R/W & 1W 50m West.				Problem (Y/N)	No				
Remarks	Water guage stn under span 1									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Intersection 100 m East- curves to West.
Vertical Alignment		4	4	West. Winding grade down to the bridge. Speed must be reduced to prepare for possible oncoming traffic.
Roadway Width (m)	9.000			Patched.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			Moderate to heavy corrosion at 50% of rail.
Guardrail		4	4	Not thrie beam.
Length (m)	26.700			Wrong lap at NE and SE. Missing splice bolts.
Current Standard (Y/N)	No			
Termination Type	TURN DOWN			
Drainage		6	6	

Approach Road				
		Last	Now	Explanation of Condition
Approach Road General Rating		4	4	
Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : TH, 2 Spans, Lengths(m): 61-61, A-Ident Number: A0075-01;A0075-02)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
Last	0	0	0	0
Now	0.0	0.0	0.0	0.0
Wearing Surface/Deck Top		4	5	Damaged planks have been replaced/repared.
(Material Type : UNTREATED TIMBER)				
(Plank Thickness(mm) : 75) (Plank Width(mm) : 250)				
Deck Rideability		5	5	
Deck Joints		X	X	
Temperature (deg. C)				
(Expansion Type :)				
(Fixed Type :)				
Gap Size (mm)		Gap Location		
Curbs/Wheel Guards		3	5	Damaged WG's have been repaired/replaced.
(Curb Type : Standard)				
(Type : TREATED TIMBER)				
(Thickness(mm) : 100) (Width(mm) : 300)				
Bridge Rail		4	4	Incorrect laps missing 8 bolts @ each splice. Guardrail is rusting-50% superficial.
(Type : FLEX BEAM)				
Bridge Rail Posts/Blocking		5	5	
(Type : GALVANIZED POST STEEL)				
Bridge Rail/Posts Coating		4	4	
(Type :)				
Sidewalk		X	X	

Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
(Primary Span : TH, 2 Spans, Lengths(m): 61-61, A-Ident Number: A0075-01;A0075-02)							
Wide Load Damage (Y/N)	Yes					See UT report for details. Sp.1 North truss UI-L2 has 300x50 flange distortion. Wide Load damage-25mm distortion at S2 U4L5 South truss. S1U9U9 & S2U1U1, S2U9U9 - bottom flanges torn and cracked @ Holes, bends up to 40mm 3 broken Hanger bolts @ S2 Bays 1, 2, 9 loos @ S1 bay 3	
High Load Damage (Y/N)	Yes						
Top Chord		7	7				
Batter Posts		7	7				
Sway Bracings		6	6				
Diagonals		4	4				
Verticals		4	4				
Portals		3	3				
Connections		3	3				
Floor Beams		6	6				
Bottom Chord		6	6				
(No. of Stringers : 13;13)							13/bay x 20 6 lines of unpainted strengthen stringers 250 x 120.
Stringer Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now							
Stringers			6	6			
(Type : STEEL)							
(Width(mm) : 130)							
(Depth(mm) : 310)							
(Spacing(mm) : 432)							
Paint Condition		3	3			50% corrosion at splash zone. Corrosion is worst on span 2 as salt gets tracked onto the bridge.	
(Colour Description :)							
(Colour Code :)							
Touchup Required (Y/N)	No						
Bearings		5	5			Over expanded 75 mm @ A1 15mm @ A2. Truss jammed tight to backwalls. At abutments. At pier.	
Temperature (deg. C)	5						
(Expansion Type : ROLLER BEARING)							
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)							
Functioning (Y/N)	Yes						
Sub Deck/Deck Underside		5	5			300 & 250 mix.	
(Material Type : TREATED TIMBER)							
(Plank Thickness(mm) : 100)							
(Plank Width(mm) : 250)							
Defects (Percent Area)	2						
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							
(Extended Backwall Piles (Y/N) : N)						Tie wires between A1 front and back row of piles drooping due to no interpile blocking	
(Extended Backwall Piles Spacing(mm) :)							

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
(Total Number of Caps/Corbels : 6:6)				Concrete on 4-250mm HP piles at West.		
Bearing Seats/Caps/Corbels Detail Ratings				7 caps at A2. T.T caps no longer load bearing.		
	N (count)	1 (count)	2 (count)	3 (count)	3 steel corbels on steel caps at A2. T.T. top cap is split at North end.	
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels			7	7		
(Type : STEEL)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
Backwalls/Breastwalls			4	4	Breast wall & backwall sheeting, not low enough at West abut.	
Greatest Height (m)		3.50				
Wingwalls			5	5		
(Total Number of Bearing Piles : 9:9)				4 H-piles and 8 T.T. piles at A1.		
Piles Detail Ratings				9 T.T. piles at A2. Front T.T. caps and piles no longer carry load at both abuts.		
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Piles			5	5		
Paint/Coating			X	X		
Abutment Stability			5	5		
Scour/Erosion			6	6		
Piers/Bents						
(Type : PIER-SOLID)						
(Total Number of Caps/Corbels : 1)						
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			7	7		
(Type : CONCRETE)						
(Total Number of Bearing Piles : 0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Pier Shaft/Piles			7	7		
Greatest Height (m)		15.60				
Bracing/Struts/Sheathing			X	X		
Nose Plate			6	6		
Paint/Coating			5	5	Primer still intact.	
(Colour Description :)						
(Colour Code :)						
Pier Stability			7	7		
Scour			5	5	Minor scour at base.	
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 : S)				
(D/S Direction : N)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)	9.0			(Top of deck to top of water 16.3 m) 94/08/04 Minor drift at West headslope.
Drift (Y/N)	Yes			
Slope Protection		7	7	Concrete at West- shale at East.
(Type :)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2015	Reset splice lap. Drill holes and install bolts at missing splice locations					
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPLACE STRIP DECK	2015						
REPLACE SUB DECK							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE	2015	Recommend paint assessment or bridge replacement due to narrow width.					
STRAIGHTEN/REPLACE MEMBERS	2015	Replace 2 portals.					
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Assess for major repairs vs. replacement.					
OTHER ACTION	2015	Replace all guardrails to meet current standards.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	30.5/23.0	Est. Repl. Yr	2023	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	02-Jun-2016		Previous Inspection Date	28-Sep-2009			
Inspection Cycle (Default) (months)	39						

Comment	
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