

Bridge Inspection										
Bridge File Number	00278 -1 Bridge				Form Type	SG				
Year Built/Year Supstr	1948/1948				Lot No.	1				
Bridge or Town Name	PONOKA				Inspector Name	Jason Saly				
Located Over	BATTLE RIVER, 5, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	2A:22 C1 12.769				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	23-Nov-2011				
Legal Land Location	SW SEC 31 TWP 42 RGE 25 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:36:10, 52:39:31				Data Entry Date	03-Jan-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA17				Review Date	15-Dec-2011				
Clear Roadway/Skew	13.4 / -25 deg. (LHF)				Dept. Reviewer Name	Chris Black				
AADT/Year	4,840 / 2010 (A)				Dept. Review Date	25-Jan-2012				
Road Classification	RAU-213.4-120				Follow-Up By					
Detour Length (km)	4									
Allowable Load (t):	Single	CS1 49 GIRDER		Semi	CS2 77 GIRDER		Train	CS3 91 GIRDER		---> On Critical Spans --->Critical Member
Design Loading:	HS20									---> Primary Span
Posting Information										
Required Load Posting (t)	Single			Semi			Truck Train			
Posted Loading (t)	Single			Semi			Truck Train			
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Remarks	Not required.									
Hazard Marker At Bridge (Y/N)	No									
Remarks	Not required.									
Other Sign Types	River ID @ NW & SE corners.									
Utilities (Located at)										
Utility Attachments										
Telephone	East r/w; fibre optic West r/w.				Gas					
Power	2 wire W of fenceline.				Municipal					
Others					Problem (Y/N)	No				
Remarks										
Approach Road										
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>					
Horizontal Alignment			8	7	Intersection to S approx 100m. Bridge in a sag curve, no passing NBL.					
Vertical Alignment			7	7						
Roadway Width (m)	13.000				New guardrail with thrie beam transition installed @ all corners. NW - 70m; NE - 62.4m; SW - 47.2m; SE - 54.8m - minor creasing.					
Approach Bump			6	6						
Guardrail (Y/N)	Yes									
Guardrail			7	6						
Length (m)	47.200									
Current Standard (Y/N)	Yes									
Termination Type	Turn Down									
Drainage			4	4	Leaking onto SE, SW abutment seat.					
<b>Approach Road General Rating</b>			<b>7</b>	<b>7</b>						

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : <b>RB, 3 Spans, Lengths(m): 12.2-15.2-12.2, A-Ident Number: A0228-01</b> )							
<b>Special Features</b>							
Special Feature			X				
(Type : )							
Special Feature			X				
(Type : )							
Wearing Surface/Deck Top Detail Ratings							
	N (%)	1 (%)	2 (%)	3 (%)	Snow along curbs.		
<b>Last</b>	5						
<b>Now</b>	5.0	0.0	0.0	0.0			
Wearing Surface				4	5	Minor loss of chipseal/epoxy @ S abut joint, NBL 2.0m x 0.3m. Also failed section at N abut, SBL 3m x 1m.	
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )							
(Thickness(mm) : <b>50</b> )							
Deck Top			N	N			
Deck Rideability			7	7			
Deck Joints			4	4	(Spalled sections of concrete paving lip at N abut 5m long - photo. S abut paving lip deteriorating - photo. Leaking @ SE, SW onto abut seat. Broken plow guard at A2. 02Mar2010).		
Temperature (deg. C)		-3					
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )							
(Fixed Type : )							
Gap Size (mm)		Gap Location					
95		N. abut					
115		S. abut					
Deck Drainage			5	4	Water from deck drains splashing onto girder bottom flange, typical.		
Drains Clogged (Y/N)		No					
Curbs/Median			N	N	(Light scaling on 3% West curb top, sealed - photo. Perpendicular cracks. 1.0-1.5m spacing, not sealed. Rebar exposed and staining @ NE parapet. 23/06/05). Snow covered along curb face but spall under side of curb at SW parapet.		
(Curb Type : <b>Standard</b> )							
Scaling (Percent Area)		5					
Bridge Rail			7	7	Channel rail.  10 A/B nuts with less than full thread.		
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )							
Bridge Rail Posts			4	4			
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )							
Bridge Rail/Posts Coating			6	6			
(Type : <b>GALVANIZED</b> )							
Sidewalk			X	X			
<b>Girder/Beam</b>							
Cover Plate			X	N	Slight sag in girder. (Was rated 3 on 12May2009; 1 cover plate cracked S1G6 45mm long.)		
Flange			6	6			
Web			7	7			
Stiffeners			7	7			
Splice			7	7			
Weld			7	N			(Was rated 3. 1 cracked cover plate.)
Diaphragms/Cross Frame			7	N	(Was rated 3. 6 diaphragm welds cracked; locations marked on girder. 12May2009.)		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>RB, 3 Spans, Lengths(m): 12.2-15.2-12.2, A-Ident Number: A0228-01</b> )				
Paint Condition		4	4	Rusting on bottom flanges of exterior. 30% of exterior bottom flange peeling. Silver.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		7	7	
Temperature (deg. C)	-3			
(Expansion Type : <b>REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL</b> )				
(Fixed Type : <b>ROCKER BEARING</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	1.0mm wide transverse cracks. Efflorescence @ North span #3.
Stains (Percent Area)	0			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>6</b>	<b>3</b>	GR carried forward from 12May2009.
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		5	5	Repaired during recent bearing rehab. Vertical cracks under abutment bearings. South abutment seat reinforced under bearing #6.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		5	5	
Wingwalls		6	6	
Piles		N	N	Buried.
Paint/Coating		X	X	
Abutment Stability		6	6	
Scour/Erosion		7	7	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				Wide cracks at 1.5m spacing, some under bearings.
Bearing Seats/Caps		5	5	
(Type : <b>CONCRETE</b> )				Some vertical & horizontal cracks. Scaling 10%, more severe below normal waterline.
(Total Number of Bearing Piles : <b>0:0</b> )				
Pier Shaft/Piles		5	5	
Bracing/Struts/Sheathing		X	X	
Nose Plate		6	6	Cracks up to 1.5mm wide, rusting on nose plate.
Paint/Coating		4	4	Rusted. Silver.
(Colour Description : )				
(Colour Code : )				
Pier Stability		5	5	
Scour		6	6	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		6	6	
(Type : <b>RIP RAP; RIP RAP</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</b>	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL										
GALVANIZE/PAINT BRIDGE RAIL										
RETROFIT BRIDGE RAIL										
SEAL CURBS	2015	Patch exposed rebars @ NE parapet & patch NE & SE curbs, if not yet done.								
PATCH DECK										
SEAL DECK										
OVERLAY DECK										
REPAIR/REPLACE DECK JOINTS										
RESET/ PAINT BEARINGS										
REPAINT SUPERSTRUCTURE										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
OTHER ACTION	2012	(Repair cover plate weld. 12May2009) - if not yet done.								
OTHER ACTION	2012	(Repair diaphragm welds. 12May2009) - if not yet done.								
OTHER ACTION	2015	Extend deck drain past bottom flange at next major rehab.								
OTHER ACTION	2012	(Repair steel delam by grinding. 12May2009) - if not yet done.								
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>61.1/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.0/63.3</b>	<b>Est. Repl. Yr</b>	<b>2025</b>	<b>Maint. Reqd. (Y/N)</b>	<b>Yes</b>			
Special Comments for Next Inspection	Reports entered out of sequence so Lvl 2 girder comments added to this form on 06Dec2011.		Department Comments							
Maintenance Reviewed By		Date				Estimated Total	0			
Proposed Long-Term Strategy	2007.04-07-second generation rehab scheduled for 2015. With normal maintenance bridge should be ok until 2050.									
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	23-Aug-2013	Previous Inspection Date	02-Mar-2010							
Inspection Cycle (Default) (months)	21									

Comment

--

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2015	Patch exposed rebars @ NE parapet & patch NE & SE curbs, if not yet done.	At next rehab	2012			
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	(Repair cover plate weld. 12May2009) - if not yet done.	At next rehab	2012			
OTHER ACTION	2012	(Repair diaphragm welds. 12May2009) - if not yet done.	At next rehab	2012			
OTHER ACTION	2015	Extend deck drain past bottom flange at next major rehab.	At next rehab	2012			
OTHER ACTION	2012	(Repair steel delam by grinding. 12May2009) - if not yet done.	At next rehab	2012			
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>61.1/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.0/63.3</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Reports entered out of sequence so Lvl 2 girder comments added to this form on 06Dec2011.		Department Comments	Tentatively programmed for bridge deck rehab in 2012. AS			
Maintenance Reviewed By	Andrew Smikles		Date	15-Aug-2012	Estimated Total	0	
Proposed Long-Term Strategy	2007.04.07-second generation rehab scheduled for 2015. With normal maintenance bridge should be ok until 2050.						
On 3-Year Program (Y/N)							

Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	23-Aug-2013	Previous Inspection Date	02-Mar-2010
Inspection Cycle (Default) (months)	21		
Comment			