

Bridge Inspection												
Bridge File Number	76330 -1 Bridge					Form Type	PSR					
Year Built/Year Supstr	1967/1967					Lot No.	1					
Bridge or Town Name	ERSKINE					Inspector Name	Owen Salava					
Located Over	CPR					Inspector Class	BR CLS A					
Located On	12:12 C1 39.681					Assistant Name						
Water Body Cl./Year						Assistant Class						
Navigabil. Cl./Year						Inspection Date	31-Aug-2012					
Legal Land Location	SE SEC 5 TWP 39 RGE 20 W4M					Data Entry By	Marcia Chavez					
Longitude, Latitude	-112:50:15, 52:19:17					Data Entry Date	18-Sep-2012					
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien					
Contract Main. Area	CMA20					Review Date	06-Sep-2012					
Clear Roadway/Skew	13.7 / -38 deg. (LHF)					Dept. Reviewer Name	Andrew Smikles					
AADT/Year	4,530 / 2011 (A)					Dept. Review Date	19-Nov-2012					
Road Classification	RAU-213.4-120					Follow-Up By						
Detour Length (km)	15											
Allowable Load (t):	Single		Semi		Train	---> On Critical Spans --->Critical Member						
Design Loading:	HS20					---> Primary Span						
Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)	No											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required.											
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	Not required.											
Hazard Marker At Bridge (Y/N)	No											
Remarks	Not required.											
Other Sign Types	Curve.											
Utilities (Located at)												
Utility Attachments												
Telephone	South r/w.					Gas						
Power						Municipal						
Others	Fibre optic North r/w.					Problem (Y/N)	No					
Remarks												
Approach Road												
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>							
Horizontal Alignment				5	5	Curves at both ends.						
Vertical Alignment				6	6	At top of crest.						
Roadway Width (m)	13.000											
Approach Bump				5	5							
Guardrail (Y/N)	Yes					Minor accident bends.						
Guardrail				6	6							
Length (m)	99.000											
Current Standard (Y/N)	Yes											
Termination Type	TURNED DOWN											
Drainage				4	4	SW curb end section separated, water drains through gap.						
<b>Approach Road General Rating</b>				<b>5</b>	<b>5</b>							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 16.8-16.8-16.8, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
<b>Wearing Surface/Deck Top Detail Ratings</b>					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface			5	4	ACP / chipseal ravelled at North curb. Pothole in S2 along curb.
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>90</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			4	3	Over piers. Paved over at abuts - crack in ACP at joint. W abut joint leak - fibreboard. Tear in P1 & P2 gland (photo).
Temperature (deg. C)		12			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
97		W. pier			
116		E. pier			
Deck Drainage			5	5	No drains. Appears both sides have depressions but ponding not visible @ this time.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Broken at NE ext & SE int fascia. Broken @ South ext has been patched & parged. Parging delaminating & cracked @ 2% of area & old patches. Exposed rebar North curb near West pier. Poor patches.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		2			
Bridge Rail			4	4	Double layer; missing splice bolt N rail S2; N bridgerail has 4 damaged sections of flexbeam. 6 A/B nuts with insufficient thread. Sheared A/B @ 4th post East of P1 South side - photo.
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )					
Bridge Rail Posts			3	3	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			6	6	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	1	
<b>Now</b>	0	0	0	6	
Girders			3	3	Leaking between girders. Spall and exposed rebar S1G1 (photo). 0.3m corrosion crack S2G1 near P2. S2G3 at P1, S2G2 corrosion stains. S2G15,16 at P2 stained cracks. Desegregation void S1G6 midspan.
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : <b>48</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PM, 3 Spans, Lengths(m): 16.8-16.8-16.8, A-Ident Number: )				
Diaphragms/Cross Frame		X	X	
Bearings		6	6	
Temperature (deg. C)	12			
(Expansion Type : <b>NEOPRENE STRIP BEARING</b> )				
(Fixed Type : <b>NEOPRENE STRIP BEARING</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	6	Stains at S1 and S2 at G1-3.
Stains (Percent Area)	5			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			West abutment curbs do not line up with bridge curbs. 50 mm misalignment - minor.
Horizontal (Y/N)	Yes			
<b>Superstructure General Rating</b>		<b>3</b>	<b>3</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		N	N	Not visible behind giders.
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		X	X	
Abutment Stability		6	6	
Scour/Erosion		6	6	
<b>Piers/Bents</b>				
(Type : <b>PIER-TRESTLE</b> )				
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>9:9</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		4	4	Rusting at bottoms.
(Colour Description : )				
(Colour Code : )				
Pier Stability		6	6	
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>6</b>	<b>6</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Traffic Safety Features		X	X	
Type				
Slope Protection		3	3	Cracked & heaved @ both toes with void - photo.
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		3	3	Movement @ both headslopes West - 400mm down & 150mm out East - 200mm down & 150mm out with cracks & separation.
Drainage		5	5	
<b>Grade Separation General Rating</b>		<b>3</b>	<b>3</b>	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL	2012	Repair 1 sheared S rail post anchor bolt. Add 2 splice bolts. Replace 4 sections in S1, N rail.								
GALVANIZE/PAINT BRIDGE RAIL										
SEAL CURBS	2012	Patch NE & SE spalls; remove delam parging & seal.								
PATCH DECK										
SEAL DECK	2012	Patch deck pothole, deteriorated ACP areas.								
OVERLAY DECK										
REPAIR/REPLACE DECK JOINTS	2012	Replace pier glands. Seal leaking W abut jnt or replace. Seal E abut crack.								
RESET/PAINT BEARINGS										
WASHING										
SHOTCRETE REPAIRS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
OTHER ACTION	2012	Investigate corrosion cracks.								
OTHER ACTION	2012	Patch spall S1G1.								
OTHER ACTION	2012	Recast bottom concrete slope protection around pier piles @ both pier toes & seal cracks								
OTHER ACTION										
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>53.3/53.3</b>	<b>Est. Repl. Yr</b>	<b>2020</b>	<b>Maint. Req'd. (Y/N)</b>	<b>Yes</b>			
Special Comments for Next Inspection	Department Comments									
Maintenance Reviewed By	Date					<b>Estimated Total</b>	<b>0</b>			
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	31-May-2014	Previous Inspection Date	26-Aug-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	2012	Repair 1 sheared S rail post anchor bolt. Add 2 splice bolts. Replace 4 sections in S1, N rail.	@ Rehab	2013			
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch NE & SE spalls; remove delam parging & seal.	@ Rehab	2013			
PATCH DECK							
SEAL DECK	2012	Patch deck pothole, deteriorated ACP areas.	To Operations				
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Replace pier glands. Seal leaking W abut jnt or replace. Seal E abut crack.	@ Rehab	2013			
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Investigate corrosion cracks.	@ Rehab	2013			
OTHER ACTION	2012	Patch spall S1G1.	@ Rehab	2013			
OTHER ACTION	2012	Recast bottom concrete slope protection around pier piles @ both pier toes & seal cracks	@ Rehab	2013			
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>53.3/53.3</b>	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments	Bridge Rehab currently programmed for 2013			
Maintenance Reviewed By	Andrew Smikles		Date	20-Nov-2012	Estimated Total	0	
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							

Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	31-May-2014	Previous Inspection Date	26-Aug-2010
Inspection Cycle (Default) (months)	21		
Comment			