

Bridge Inspection							
Bridge File Number	76159 -1 Bridge			Form Type	PSR		
Year Built/Year Supstr	1967/1967			Lot No.	2		
Bridge or Town Name	ARDROSSAN			Inspector Name	Kris Bosters		
Located Over	16:20 L1 6.523;16:20 R1 6.523			Inspector Class	BR CLS A		
Located On	824:02 C1 17.237			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	27-Mar-2012		
Legal Land Location	NW SEC 11 TWP 53 RGE 22 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-113:08:52, 53:34:12			Data Entry Date	04-Apr-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA09			Review Date	04-Apr-2012		
Clear Roadway/Skew	10.4 /			Dept. Reviewer Name	Brent Herrick		
AADT/Year	2,890 / 2011 (A)			Dept. Review Date	11-Apr-2012		
Road Classification	RAU-210-110			Follow-Up By			
Detour Length (km)	1						
Allowable Load (t):	Single	CS1 33 GIRDER	Semi	CS2 54 GIRDER	Train	CS3 64 COLUMN	----> On Critical Spans ---->Critical Member
Design Loading:	HS20						----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 16 L1 5.2m, 16 R1 5.2m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	EB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks												
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		Information, Exit Speed 30.										

Utilities (Located at)				
Utility Attachments				
Telephone	Along North r/w.		Gas	100 m North of structure.
Power	3 lines North & East of r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical on/off ramps. Crest curve, no passing, limited sight distances.
Vertical Alignment		6	6	
Roadway Width (m)	10.400			Ends of flexbeam rail rusty all 4 corners @ parapet connection. Not connected to parapet @ NE, parapet spalled at rail connection-SW.-photo No thrie beam.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			
Guardrail		3	3	
Length (m)	60.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		3	3	Holes in ACP along NE parapet allow water to drain under approach. -photo NEw drain troughs.

Approach Road					
			Last	Now	Explanation of Condition
Approach Road General Rating			6	6	
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)					
Special Features					
Special Feature			7	7	special feature type: "Steel Reinforcing @ pier legs" - rate '8'. Special feature type: 'underslung diaphragm' -rate '8'.
(Type : EXT LATER POST TENS)					
Hinge			4	3	Random delams and spalls with rust stains along hinges, worst on exterior girders.-photo
(Hinge Type : CONC)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Gravel buildup along curbs.
Last					
Now	10.0	0.0	0.0	0.0	
Wearing Surface			5	5	1.2m x 0.2m delam near P1.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			6	4	N. joint appears to be leaking as evident by water and stains on backwall.-photo Measured @ cl
Temperature (deg. C)		6			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)		Gap Location			
67			S. abutment		
78			S. hinge		
82			N. hinge		
78			N. abutment		
Deck Drainage			N	4	No deck drains. N joint leaking.
Drains Clogged (Y/N)					
Curbs/Median			4	4	Long wide crack at abase of parapet on W. side in middle of span 2.-photo
(Curb Type : NEW JERSEY)					
Scaling (Percent Area)		2			Wide cracks on outside face under posts at previous repairs. Vertical hairline cracks every 0.3m.
Bridge Rail			7	7	
(Type : GALVANIZED STEEL BRIDGE TUBE)					Rail access hole cap missing at NE.-photo
Bridge Rail Posts			4	7	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	

Superstructure							
Bridge Component				Last	Now	Explanation of Condition	
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)							
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now							
				0	0	0	2
Girders				4	3	Wide cracks @ shoe plates 75% girders. Minor delams & spalls at hangers. Typical FC narrow cracking in chamfer @ ends. Spall in S3G5-W. Lack of cover on stirrup leg - photo. Spot rusting in leg of S1G1, G7 & S2G7. Rust spots East leg G7 S1. Exposed rusting rebar outside face of S2G1 due to low cover.	
Cracking (Y/N)		Yes					
Spalling (Percent Area)		0					
(Number Of Girders : 7)				Wide crack with rust S1G7.-photo 10mm crack at end of girder at hanger S1H1 & 2.-photo			
Diaphragms/Cross Frame				4	4	Cracked & rust stained with rebar exposed@ S2G6 North end. Delam cracks and rust stains near chamfer S3G3 & 6.photo	
Bearings				4	4	All 4 corner bearings are slightly distorted, rest not visible without ladder.	
Temperature (deg. C)		6					
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				Grout pad @ NW bearing @ A2 deteriorated.			
(Fixed Type : PINNED BEARING)				Exterior bearings are rusting.			
Coating Adequate (Y/N)		No		Exposed bearing plates rusting at hinge 1 & 2 on West side and hinge on East side.-photo			
Functioning (Y/N)		Yes					
Deck Underside				6	6		
Stains (Percent Area)		1					
Span Alignment Problems							
Vertical (Y/N)		No					
Horizontal (Y/N)		No					
Superstructure General Rating				4	3		
Substructure							
Bridge Component				Last	Now	Explanation of Condition	
Abutments							
Bearing Seats/Caps (Type : CONCRETE)				5	5	Narrow delam drack 2m long @ W. end of South abut. 500mm dia. spalls on face at 3 locations.	
Backwalls/Breastwalls				6	6		
Wingwalls				6	6		
Piles				N	N		
Paint/Coating				6	6		
Abutment Stability				6	6		
Scour/Erosion				3	8		
Piers/Bents							
(Type : PIER-COLUMN)							
Bearing Seats/Caps (Type : CONCRETE)				7	7		
(Total Number of Bearing Piles : 0:0)				4 pier columns (2 piles/column).			
Pier Shaft/Piles				7	7		
Bracing/Struts/Sheathing				X	X		
Nose Plate				X	X		

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		7	7	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Traffic Safety Features		7	7	
Type	Guardrail			
Slope Protection		5	5	South abutment settled & cracked - out 270. Down 80. North 150 out, 50 down along West half. Repaired by casting concrete in void.
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		6	6	
Grade Separation General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace NE approach connections.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Repair leaking joints.					
RESET/ PAINT BEARINGS	2012	Repair grout bearing pad @ NW corner.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Patch ACP along parapets.					
OTHER ACTION	2012	Repair spall on parapet at SW.					
OTHER ACTION	2012	Consider options for preventing further deterioration and/or repairing pinned girder connections.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	55.4/54.2	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking and spalling. Monitor diaphragm in S2. Monitor crack in base of parapet @ S2. Monitor delam crack at South abut.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	27-Dec-2013		Previous Inspection Date	23-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							