

Bridge Inspection										
Bridge File Number	75420 E-5 Bridge					Form Type	SG			
Year Built/Year Supstr	2002/2002					Lot No.	4			
Bridge or Town Name	RED DEER					Inspector Name	Owen Salava			
Located Over	2:24 R1 33.039;2:24 L1 32.981					Inspector Class	BR CLS A			
Located On	11:12 R1 35.170					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	19-Mar-2013			
Legal Land Location	NW SEC 19 TWP 38 RGE 27 W4M					Data Entry By	Marcia Chavez			
Longitude, Latitude	-113:51:42, 52:17:13					Data Entry Date	30-Mar-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien			
Contract Main. Area	CMA19					Review Date	24-Mar-2013			
Clear Roadway/Skew	14.9 / -21 deg. (LHF)					Dept. Reviewer Name	Chris Black			
AADT/Year	26,740 / 2011 (A)					Dept. Review Date	09-Apr-2013			
Road Classification	RAD-412.4-120					Follow-Up By				
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 28			Semi	CS2 49		Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	CS750					----> Primary Span				

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N) Yes												
Posted:	Lane	NB	On Bridge (m)	5.2	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks Advance high load warning system, 5.879 measured, second structure governs.												
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)		In Advance (Y/N)		At Bridge (Y/N)					
Remarks Not required.												
Hazard Marker At Bridge (Y/N)		No										
Remarks		Not required.										
Other Sign Types												

Utilities (Located at)									
Utility Attachments									
Telephone	Yes - no markers.					Gas			
Power	Light conduit under bridge.					Municipal			
Others	Light standard @ SE/SW corners.					Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Traffic lights to East & West.
Vertical Alignment		7	7	
Roadway Width (m)	14.900			A1 approach slab settled 160mm.
Approach Bump		5	5	Ramps onto span.
Guardrail (Y/N)		Yes		
Guardrail		8	7	
Length (m)	76.000			
Current Standard (Y/N)		Yes		
Termination Type		Turn Down		
Drainage		4	6	All trough drains broken/settled at top - repair appears to be working.
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 2 Spans, Lengths(m): 42-42, A-Ident Number: A1333-01)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow along curbs.
Last	0	0	0	0	
Now	10.0	0.0	0.0	0.0	
Wearing Surface			7	6	Very thick. Longit. cracks.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 170)					
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			4	6	
Temperature (deg. C)		0			
(Expansion Type : GLAND (SILICON SEAL))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
88			East abutment		
80			West abutment		
Deck Drainage			8	7	
Drains Clogged (Y/N)		No			
Curbs/Median			7	7	Typical narrow vertical cracking @ 1.2m interval. Typical narrow transverse cracking with efflorescence staining at curb U/S. 130mm curb exposed ~170mm ACP.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			8	8	
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			8	8	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			8	8	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder/Beam					
Cover Plate			X	X	
Flange			8	8	
Web			8	8	
Stiffeners			8	8	
Splice			8	8	
Weld			8	8	
Diaphragms/Cross Frame			8	8	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 2 Spans, Lengths(m): 42-42, A-Ident Number: A1333-01)				
Paint Condition		8	8	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		8	8	
Temperature (deg. C)	0			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		7	7	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		9	9	
Wingwalls		8	8	
Piles		N	N	
Paint/Coating		7	7	
Abutment Stability		9	9	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				Single shaft.
Pier Shaft/Piles		9	9	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		8	8	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		5	5	
Type	Guardrail			
Slope Protection		8	8	Abutment 1 settled 20mm out, 60mm down. Abutment 2 settled 25mm out, 60mm down.
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	5	
Drainage		4	4	(Low area at toe East abutment concrete slope, apparently ponds. 14Sep2011).
Grade Separation General Rating		4	4	

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							
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	83.3/83.3	Sufficiency Rating (Last/Now) (%)	62.8/62.8	Est. Repl. Yr	2063	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	No action for E toe ponding - away from traffic and behind barrier.		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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	19-Dec-2014		Previous Inspection Date	14-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							