

Bridge Inspection										
Bridge File Number	06615 -1 Bridge				Form Type	SG				
Year Built/Year Supstr	1960/1960				Lot No.	2				
Bridge or Town Name	DRUMHELLER				Inspector Name	Owen Salava				
Located Over	RED DEER RIVER, 3, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	9:06 C1 1.534				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	01-Nov-2011				
Legal Land Location	NE SEC 11 TWP 29 RGE 20 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-112:42:43, 51:28:04				Data Entry Date	24-Nov-2011				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA21				Review Date	13-Nov-2011				
Clear Roadway/Skew	9 /				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	2,810 / 2010 (A)				Dept. Review Date	24-Nov-2011				
Road Classification	RAU-211.8-110				Follow-Up By					
Detour Length (km)	5									
Allowable Load (t):	Single		Semi		Train		---> 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	Tourist info to East. Red Deer River, Max 35 km/hr. Memorial plaques at NW and SE.									

Utilities (Located at)										
Utility Attachments	GAS UTILITIES; OTHER UTILITIES; TELEPHONE UTILITIES-PHONE LINE									
Telephone	In East sidewalk.				Gas	U/S side.				
Power					Municipal					
Others	New conduit underside west curb. Street lights on structure.				Problem (Y/N)	No				
Remarks										

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			5	5	Sharp curves both ends. In town of Drumheller.				
Vertical Alignment			6	6					
Roadway Width (m)	11.500				Pothole at A1 NB.				
Approach Bump			6	6					
Guardrail (Y/N)	Yes				13 section flexbeam at NW. Concrete barriers SE. Chain link fence @ SW.				
Guardrail			6	6	1 split post & 2 missing splice bolts - photo. Curb/sidewalk extends beyond bridge at both ends.				
Length (m)	48.000								
Current Standard (Y/N)	No								
Termination Type	Bulb end								
Drainage			6	6					
Approach Road General Rating			5	5					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : RB, 5 Spans, Lengths(m): 27.4-34.4-34.4-34.4-27.4, A-Ident Number: A0289-01)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last						
Now	0.0	0.0	0.0	0.0		
Wearing Surface			6	6	Local delam in S1 center of lane. 2m x 0.4. Wear in wheelpath.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Deck Top			N	N		
Deck Rideability			6	6		
Deck Joints			6	6		
Temperature (deg. C)		-5				
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
55		N. abutment				
45		S. abutment				
Deck Drainage			5	5	Deck drains should be 300mm longer as spray still gets onto girder flanges.	
Drains Clogged (Y/N)		No				
Curbs/Median			7	7	Concrete parapet between road & sidewalk.	
(Curb Type : STRAIGHT WALL)						
Scaling (Percent Area)		0				
Bridge Rail			7	7	Many A/B undersized nuts.	
(Type : GALVANIZED STEEL VERTICAL BAR;NON-STANDARD RAIL)						
Bridge Rail Posts		4	5			
(Type : GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			9	9		
(Type : GALVANIZED)						
Sidewalk			7	7		
Girder/Beam						
Cover Plate			7	7	(All spans inspected from ice. 21/Feb/2009).	
Flange			7	7		
Web			7	7		
Stiffeners			7	7		
Splice			7	7		
Weld			7	7		
Diaphragms/Cross Frame			7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 5 Spans, Lengths(m): 27.4-34.4-34.4-34.4-27.4, A-Ident Number: A0289-01)				
Paint Condition		5	5	Girders only. Rusting at deck drain locations.
(Colour Description : GREEN)				
(Colour Code : 14090)				
Touchup Required (Y/N)	No			
Bearings		5	5	Steel plates on neoprene both abuts. Rockers over P1-2 & 4, fixed on P3. (1 bearing has cracked weld on G4P4. 2003/10/04). 9 pier A/B nuts & washers missing. P1 - 5, P2 - 0, P3 - 0, P4 - 4. NW abut bearing missing one A/B at exterior.
Temperature (deg. C)	-5			
(Expansion Type : ROCKER BEARING)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	5			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	Moderate scaling both abuts.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				(Vertical crack full height P2, both sides - photo. 21/Feb/2009) Unable to verify.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Rusting nose plate.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	6	
Debris (Y/N)	Yes			Rebar at south headslope.
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				WSC gauge station @ SW corner.
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible. Flood gauge on P2.
Drift (Y/N)		No		
Slope Protection		6	6	Old concrete & gabion on S, natural on N. Gabions losing rocks, rebar sticking out of S hslp. N abut bagged concrete.
(Type : NATURAL; GABION)				
Guidebank/Spurs		X	7	N bank u/s & d/s.
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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	2012	Install 9 anchor bolt nuts & washers. Repair cracked weld on bearing keeper plate. Install 25mm dia x 150L A/B & nut on NW abutment bearing.								
REPAINT SUPERSTRUCTURE										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
OTHER ACTION	2012	Remove S rebar hslp.								
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	57.7/58.2	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	See 2003 Cover Plate report for diaphragm & bearing details.		Department Comments							
Maintenance Reviewed By			Date		Estimated Total	0				
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)	Y									
Proposed Action	2006.05.10 Rehab 2008/2009 \$900,000									
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	01-Aug-2013	Previous Inspection Date	11-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						
PATCH DECK						
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS						
RESET/ PAINT BEARINGS	2012	Install 9 anchor bolt nuts & washers. Repair cracked weld on bearing keeper plate. Install 25mm dia x 150L A/B & nut on NW abutment bearing.	Programmed	2012		
REPAINT SUPERSTRUCTURE						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Remove S rebar hslp.	Programmed	2012		
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	57.7/58.2	Est. Repl. Yr	2030	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	See 2003 Cover Plate report for diaphragm & bearing details.		Department Comments	Rehab scheduled in PMA for 2021. DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	30-Oct-2012	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)	Y					
Proposed Action	2006.05.10 Rehab 2008/2009 \$900,000					
Previous Inspector's Name	Owen Salava		Previous Assistant's Name			
Next Inspection Date	01-Aug-2013		Previous Inspection Date	11-Mar-2010		

Inspection Cycle (Default) (months)	21
Comment	