

Bridge Inspection											
Bridge File Number	08459 -1 Bridge				Form Type	SG					
Year Built/Year Supstr	1987/1987				Lot No.	3					
Bridge or Town Name	WATER VALLEY				Inspector Name	Owen Salava					
Located Over	LITTLE RED DEER RIVER, 3.89, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	579:02 C1 36.198				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	09-Aug-2011					
Legal Land Location	NW SEC 29 TWP 29 RGE 5 W5M				Data Entry By	Marcia Chavez					
Longitude, Latitude	-114:40:21, 51:30:41				Data Entry Date	16-Sep-2011					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien					
Contract Main. Area	CMA28				Review Date	15-Aug-2011					
Clear Roadway/Skew	9 /				Dept. Reviewer Name	Andrew Smikles					
AADT/Year	200 / 2010 (A)				Dept. Review Date	19-Sep-2011					
Road Classification	RCU-209-110				Follow-Up By						
Detour Length (km)	6										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	MS300									----> Primary Span	

Posting Information									
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	Required as road is wider than bridge.								
Other Sign Types	Steep hill, 65 km curve signs								

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	North r/w.				Gas				
Power	2 wires 30m North.				Municipal				
Others	Environmental shack NW.				Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			4	4	Sharp curve and hill at east end.				
Vertical Alignment			4	4	Intersection on west end. Limited sight distance both directions. No passing.				
Roadway Width (m)			10.000		9m road width @ East.				
Approach Bump			4	6	ACP @ approaches, map cracking. Trees growing @ NE embankment beside wingwall/girders.				
Guardrail (Y/N)			Yes		Missing transition bolts (2) @ NW - photo.				
Guardrail			4	4					
Length (m)			15.200		Not thrie beam. Insufficient length/post/spacing. SW turn down end damaged but functioning.				
Current Standard (Y/N)			No						
Termination Type			Turn Down						
Drainage			4	5	Gap btwn slab & curb at SW corner.				
Approach Road General Rating			4	4					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 3 Spans, Lengths(m): 17-22-17, A-Ident Number: A1082-01)					
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	Some narrow width longitudinal & transverse cracks, 4 lines. Random transverse cracking.
(Material Type : CONCRETE)					
(Thickness(mm) : 100)					
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			X	X	Curb cover plate at abutments lifted due to approach curb settlement, typical - photo.
Temperature (deg. C)		23			
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
Deck Drainage			7	7	West abutment stains from joint. Drains @ West end only.
Drains Clogged (Y/N)		No			
Curbs/Median			7	7	Cracks on curb face about every 700mm.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			9	8	
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			9	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, 3 Spans, Lengths(m): 17-22-17, A-Ident Number: A1082-01)				
Paint Condition		X	X	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		5	5	At max expansion @ W abut, stream face of bearing inline with girder bearing plate - photo. Neoprene pads. Neoprene pads.
Temperature (deg. C)	23			
(Expansion Type :)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)	1			
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		9	9	
(Type : CONCRETE)				
Backwalls/Breastwalls		9	9	
Wingwalls		9	9	
Piles		N	N	
Paint/Coating		7	7	Staining @ West abutment leaking from joint plumbing.
Abutment Stability		8	8	
Scour/Erosion		8	8	
Piers/Bents				
(Type : PIER-COLUMN)				Columns.
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 5:5)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		8	8	
Nose Plate		X	X	
Paint/Coating		8	8	
(Colour Description : YELLOW)				
(Colour Code : 505-101)				
Pier Stability		8	8	
Scour		8	8	
Debris (Y/N)	No			
Substructure General Rating		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		9	9	
Bank Stability		6	6	
HWM (m below Top of Curb)				HWM not visible this inspection. Trees @ banks and jammed at bottom chords of pony truss bridge D/S. Can't confirm if this is high water.
Drift (Y/N)	No			
Slope Protection		9	9	
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	9	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		9	9	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Install missing transition bolts @ NW corner.					
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	2012	Seal gap & fill hole @ approach curb/slabs.					
OTHER ACTION	2012	Install hazard markers, all corners.					
OTHER ACTION	2012	Upgrade approach guardrail to meet standard.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	72.2/72.2	Sufficiency Rating (Last/Now) (%)	61.5/63.0	Est. Repl. Yr	2060	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Nov-2014		Previous Inspection Date	01-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							