

Bridge Inspection									
Bridge File Number	74358 -1 Bridge				Form Type	SG			
Year Built/Year Supstr	1955/1955				Lot No.	1			
Bridge or Town Name	VIOLET GROVE				Inspector Name	Arnold Assenheimer			
Located Over	PEMBINA RIVER, 8.11.84, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	753:02 C1 4.352				Assistant Name	Wade Nanninga			
Water Body Cl./Year					Assistant Class	BR CLS B			
Navigabil. Cl./Year					Inspection Date	24-Jan-2011			
Legal Land Location	NW SEC 7 TWP 48 RGE 9 W5M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-115:18:53, 53:07:54				Data Entry Date	28-Feb-2011			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Stew Hagan			
Contract Main. Area	CMA11				Review Date	15-Feb-2011			
Clear Roadway/Skew	8.5 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	510 / 2009 (A)				Dept. Review Date	02-Mar-2011			
Road Classification	RCU-211.0-110				Follow-Up By				
Detour Length (km)	20								
Allowable Load (t):	Single	CS1 38 GIRDER	Semi	CS2 55 GIRDER	Train	CS3 62 GIRDER	---> 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		58.0 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									
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Dirty, not functioning. Erected on 3/4 guardrail posts, not to standard.								
Other Sign Types	Curve, "Pembina River" @ SE & NW corners.								

Utilities (Located at)									
Utility Attachments									
Telephone	East r/w.				Gas				
Power					Municipal				
Others					Problem (Y/N)	No			
Remarks									

Approach Road									
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>				
Horizontal Alignment			6	6	Approaches at all four corners. Curve at both ends, limited sight distance in bottom of sag curve. No passing.				
Vertical Alignment			6	6					
Roadway Width (m)	11.200				Lacks intermediate posts on 1st section. Not thrie beam type.				
Approach Bump			7	7					
Guardrail (Y/N)	Yes								
Guardrail			7	7					
Length (m)	30.000								
Current Standard (Y/N)	No								
Termination Type	Turned Down								
Drainage			4	4	Gullies on both headslopes.				
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : <b>RG, 3 Spans, Lengths(m): 30.5-40.2-30.5, A-Ident Number: A0235-01</b> )						
<b>Special Features</b>						
Special Feature			X			
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Gutters snow covered.	
<b>Last</b>	10					
<b>Now</b>	10.0	0.0	0.0	0.0		
Wearing Surface				4	4	Water staining deck through numerous wide random cracks. Transverse cracking, abrasion and scaling 20% of surface.
(Material Type : )						
(Thickness(mm) : )						
Deck Top				N	N	
Deck Rideability				7	6	
Deck Joints				3	3	South abutment cover plate has minor plow damage near c/l. Both abutment joints have failed. Evident from backwall staining - photo. Joints slapping under traffic.
Temperature (deg. C)		0				
(Expansion Type : <b>SLIDING PLATES</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
		N. abut.				
		S. abut.				
Deck Drainage				4	4	Damage at abutment and girder ends from joint leakage. Snow covered.
Drains Clogged (Y/N)		No				
Curbs/Median				5	N	Typical hairline transverse cracks through curbs with minor rust stains on underside. Inside face & top snow covered.-17-Dec-2007
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		5				
Bridge Rail				4	N	Missing rail/post connection bolt in lower rail @ NE corner - photo.-17-Dec-2007  (Numerous posts patched. 3 posts at SW cracked at bottom. 1 with exposed rebar - photo. 16/Sept/2004) Numerous posts cracked with parging delams. -17-Dec-2007
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts				4	N	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating				7	7	
(Type : <b>GALVANIZED</b> )						
Sidewalk				X	X	
<b>Girder/Beam</b>						
Cover Plate				8	8	Rivetted girders.
Flange				8	8	
Web				8	8	
Stiffeners				8	8	
Splice				8	8	
Weld				8	8	
Diaphragms/Cross Frame				8	8	Only weld is bearing to girder. All other connections rivets.

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>RG, 3 Spans, Lengths(m): 30.5-40.2-30.5, A-Ident Number: A0235-01</b> )				
Paint Condition		5	7	5% chalking on 20% of fascia. Peeling of top coat near abutments.
(Colour Description : <b>GREEN</b> )				
(Colour Code : <b>14090</b> )				
Touchup Required (Y/N)	No			
Bearings		4	4	Bolts not tightened down on north pier. Both abutment bearings overextended & corroded - photo.
Temperature (deg. C)	-7			
(Expansion Type : <b>ROCKER BEARING</b> )				
(Fixed Type : <b>PINNED BEARING</b> )				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	No			
Deck Underside		4	4	Transverse cracking. Efflorescence at cracks. Staining from leaking through cracks in wearing surface
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		4	4	Spalling S abut with corroded rebar exposed.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		X	X	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		8	7	
Scour/Erosion		4	4	Erosion gulley in N abut.
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0:0</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		6	6	
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		N	N	
Debris (Y/N)	Yes			Sheet piling near piers.
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible. Drift caught on piers.
Drift (Y/N)	Yes			
Slope Protection (Type : <b>NONE; NONE</b> )		6	4	Erosion gulley N headslope.
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Rehab spalled/delam concrete posts; replace missing rail/post connection bolts.-if not done					
GALVANIZE/PAINT BRIDGE RAIL	2011	Also recondition rail brackets anchored to concrete bridgerail posts.-if not done					
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2011	Replace both abutment joints.					
RESET/ PAINT BEARINGS	2011						
REPAINT SUPERSTRUCTURE	2011	Paint end 2m of girders at abutments & paint end diaphragms.					
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	Assessment for bridge rehab.					
OTHER ACTION	2011	Rehab abutment seat/cap & seal.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>51.6/47.7</b>	Est. Repl. Yr	2035	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	All action recommended above for 2011 to be considered for major rehab.		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	24-Apr-2014		Previous Inspection Date	17-Dec-2007			
Inspection Cycle (Default) (months)	39						
Comment							