

Bridge Inspection									
Bridge File Number	08132 -1 Bridge				Form Type	SG			
Year Built/Year Supstr	1950/1983				Lot No.	3			
Bridge or Town Name	EMPRESS				Inspector Name	Jason Saly			
Located Over	RED DEER RIVER, 3, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	899:01 C1 1.030				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	30-Mar-2011			
Legal Land Location	NW SEC 13 TWP 23 RGE 1 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-110:01:42, 50:57:50				Data Entry Date	19-Apr-2011			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Dave Lam			
Contract Main. Area	CMA22				Review Date	10-Apr-2011			
Clear Roadway/Skew	7.5 /				Dept. Reviewer Name	Chris Black			
AADT/Year	230 / 2011 (A)				Dept. Review Date	14-Mar-2013			
Road Classification	RCU-208-110				Follow-Up By				
Detour Length (km)	24								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	MS230						----> 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)	Yes								
Remarks									
Other Sign Types									
Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	In W curb conduit.				Gas				
Power	3W - 20m East				Municipal				
Others	Fibre optics @ East R/W.				Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Curves both ends.				
Vertical Alignment			6	6	Blind curve to South.				
Roadway Width (m)	9.200								
Approach Bump			5	5					
Guardrail (Y/N)			Yes						
Guardrail			7	6					
Length (m)	30.500								
Current Standard (Y/N)			No		Not thrie beam transition.				
Termination Type			TURN DOWN ENDS						
Drainage			7	5	Minor erosion @ South end both ditches.				
Approach Road General Rating			6	6					

Superstructure						
Bridge Component		Last		Now		Explanation of Condition
(Primary Span : WG, 4 Spans, Lengths(m): 53.9-53.9-53.9-53.9, A-Ident Number: A0907-01)						
Special Features						
Special Feature						X
(Type :)						
Special Feature						X
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now	0.0	0.0	0.0	0.0		
Wearing Surface				5	6	(Mainly single rock spalls (soft agg.) on wearing surface. Isolated minor spalls. S span 25% light scaling. 30Jul2008). Chipseal coat placed in 2008.
(Material Type : CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) :)						
Deck Top				N	N	
Deck Rideability				8	8	(Bird baths E side-photo #1. 01/08/08).
Deck Joints				3	4	NE + cover plate bolts + plate loose and pounds under traffic. Jnts were flood tested on 26Jul2010, no leakage observed.
Temperature (deg. C)		-3				
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
94		S Abut				
111		N Abut				
Deck Drainage				4	5	
Drains Clogged (Y/N)		No				
Curbs/Median				6	6	Vertical cracks every 500-1000mm. Minor scrapes @ base of curb; exposed water stop in E curb middle of bridge for 2.0m @ S3.
(Curb Type : Standard)						
Scaling (Percent Area)		1				
Bridge Rail				8	8	Isolate grout pad deterioration W rail S2.
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts				8	5	
(Type : POST STEEL;POST STEEL)						
Bridge Rail/Posts Coating				8	8	
(Type : GALVANIZED)						
Sidewalk				X	X	
Girder/Beam						
Cover Plate				8	X	Three girder system. Viewed from banks. Could not inspect S2.
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, 4 Spans, Lengths(m): 53.9-53.9-53.9-53.9, A-Ident Number: A0907-01)				
Paint Condition		8	8	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		8	7	
Temperature (deg. C)	-3			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	7	A few narrow cracks with leaching.
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		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		7	7	
Abutment Stability		7	7	
Scour/Erosion		8	8	
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Nose plate paint 75% failed. paint - silver
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		N	N	Water too dark to see scour. Ice covered.
Debris (Y/N)	No			(28Nov2008)
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Ice covered. (28Nov2008)
(D/S Direction : E)				
Alignment		6	6	
Bank Stability		5	5	Steep cut @ NW.
HWM (m below Top of Curb)	6.0			
Drift (Y/N)	No			
Slope Protection		7	6	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	8	
(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	2011	Bolt down cover plates.					
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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	67.0/66.9	Est. Repl. Yr	2039	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date		Estimated Total	0	
Proposed Long-Term Strategy	2005.03.10 Deck rehab may be required by 2020. Bridge should be good until 2080.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Tom Carey		Previous Assistant's Name				
Next Inspection Date	30-Jun-2014		Previous Inspection Date	30-Jul-2008			
Inspection Cycle (Default) (months)	39						
Comment							