

Bridge Inspection										
Bridge File Number	76339 E-1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1969/1969				Lot No.	2				
Bridge or Town Name	CLOVERBAR 08				Inspector Name	Wade Nanninga				
Located Over	RAMP 88-1 A;CPR				Inspector Class	BR CLS A				
Located On	16:18 R1 1.525				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	21-Aug-2012				
Legal Land Location	NW SEC 9 TWP 53 RGE 23 W4M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-113:20:02, 53:34:12				Data Entry Date	28-Aug-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA09				Review Date	22-Aug-2012				
Clear Roadway/Skew	12.2 / -52 deg. (LHF)				Dept. Reviewer Name	Brent Herrick				
AADT/Year	47,380 / 2011 (A)				Dept. Review Date	30-Aug-2012				
Road Classification	RAD-412.4-120				Follow-Up By					
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 38 GIRDER	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member			
Design Loading:	HS20						----> Primary Span			

Posting Information									
Required Vert. Clearance Posting (m)	UNDER: 88-1-A 6.5m								
Posted Vertical Clearance (Y/N)	No								
Posted:	Lane	NB	On Bridge (m)	In Advance (Y/N)	Lane	SB	On Bridge (m)	In Advance (Y/N)	
Remarks	Posted on WB structure								
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	Not required.								
Other Sign Types	Information								

Utilities (Located at)										
Utility Attachments										
Telephone	Buried in ditch between P2 and P3.				Gas	South side at CPR and 216 adn under bridge between P2 and P3.				
Power	6 wires in North r/w.				Municipal					
Others	Light standards.				Problem (Y/N)	No				
Remarks	Light standards at SE and SW are rusting at splash zone.									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			8	8	Top of crest curve.				
Vertical Alignment			7	7	No rail at Nort East corner.				
					Drain trough broken SE - photo.				
Roadway Width (m)	12.200				Could not confirm - too much traffic.				
Approach Bump			6	6	Wide crack in East approach.				

Approach Road					
		Last	Now	Explanation of Condition	
Guardrail (Y/N)	Yes			Insufficient posts. Connection to parapet @ SW corner is loose (photo). 1 broken post and 1 section W-beam damaged @ SE (photo).	
Guardrail		4	4		
Length (m)	95.000				
Current Standard (Y/N)	No				
Termination Type	Crash attenuator				
Drainage		5	5	Drain troughs cracked/broken.	
Approach Road General Rating		7	7		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 5 Spans, Lengths(m): 21.3-25.9-15.2-25.9-21.3, A-Ident Number:)					
Special Features					
Special Feature		8	8		
(Type : UNDERSLUNG DIAPHR)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Viewed from corners due to traffic.
Last	0	0	0	0	
Now	50.0				
Wearing Surface		5	4	Few potholes up to 75mm diameter along joint on S4.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)		Chipseal 40% worn off in South lane.			
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		4	4	(Seal damaged. 23-Jun-2005). Water staining on all pier caps - cannot confirm if recent.	
Temperature (deg. C)	30				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))		Plow deflectors missing @ A1 = 3, P1 = 3, P2 = 3, P3 =2, P4 = 4, A2 = 4 (photo @ A1).			
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)	Gap Location	Viewed from corners due to traffic, could not confirm measurements.			
110	Abut 2				
125	Pier 4				
110	Pier 3				
	Pier 2				
110	Pier 1				
108	Abut 1				
Deck Drainage		5	5	No drains. Staining.	
Drains Clogged (Y/N)					
Curbs/Median		6	6	Parapet.	
(Curb Type : NEW JERSEY)					
Scaling (Percent Area)	2				
Bridge Rail		7	7	On parapet.	
(Type : GALVANIZED STEEL PARAPET RAIL)		11th bridgerail post from East, along North parapet has been dented.			
Bridge Rail Posts		4	4	Red paint is gone - 50%. Galvanizing still intact under paint.	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type : GALVANIZED)					

Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
(Primary Span : FC, 5 Spans, Lengths(m): 21.3-25.9-15.2-25.9-21.3, A-Ident Number:)							
Sidewalk		X		X			
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	2			
Now				1			
Girders		3		3		Typical chamfer cracks. Spot rust staining on numerous girders is caused by low cover, not strands. Wide S4G1 has wide vertical crack at girder end with stain (photo). Wide vert. crack @ end of S4-G8 (photo).	
Cracking (Y/N)		Yes					
Spalling (Percent Area)		0					
(Number Of Girders : 40)							
Diaphragms/Cross Frame		4		4		Several S5G5 diaphragms and S1G1 has large spall (photo).	
Bearings		4		4		Bearings pads @ abuts deformed. Anchor bolts have sheared off, 4 sheared, 2 left on W abut. 2 left on E abut and W abut. Pads distorted due to skew at abutments. Need snooper to inspect pier bearings. Not all abutment bearings have A/Bs; 50% of A/Bs are sheared. 2 bent A/B's over P4. Bearing pad is sliding off grout pad @ S1G2, S1G7, S1G8 (photo).	
Temperature (deg. C)		8					
(Expansion Type : REINFORCED PAD BEARING)							
(Fixed Type : REINFORCED PAD BEARING)							
Coating Adequate (Y/N)		Yes					
Functioning (Y/N)		Yes					
Deck Underside		6		5		Old stains around weep tubes. S2 stained from train exhaust.	
Stains (Percent Area)		2					
Span Alignment Problems							
Vertical (Y/N)		No				Likely due to skew pressure - abut. bearings deformed. Several patches from punchout repairs.	
Horizontal (Y/N)		Yes					
Superstructure General Rating		3		3			
Substructure							
Bridge Component		Last		Now		Explanation of Condition	
Abutments							
Bearing Seats/Caps		6		6			
(Type : CONCRETE)							
Backwalls/Breastwalls		6		6			
Wingwalls		5		5			
Piles		N		N			
Paint/Coating		5		5			
Abutment Stability		5		4		Sheared AB	
Scour/Erosion		X		6		Concrete protection heaving.	
Piers/Bents							
(Type : PIER-COLUMN)							
Bearing Seats/Caps		4		4		Delam cracks @ P1, P3, & P4. Spall at N end of P2 (photo). Water staining on all pier caps. Cannot confirm if recent.	
(Type : CONCRETE)							
(Total Number of Bearing Piles : 4:4:4:4)							
Pier Shaft/Piles		5		5			
Bracing/Struts/Sheathing		X		X			
Nose Plate		X		X			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		4	4	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		5	5	Curve from North.
Traffic Safety Features		7	7	
Type	Guardrail / Lighting			
Slope Protection		6	6	
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		5	5	
Grade Separation General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Repair seal joints, if not done. Install missing plow deflectors.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Install additional G.R. posts @ SW corner and repair transition.					
OTHER ACTION	2012	Install shear blocks.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	43.9/43.9	Est. Repl. Yr	2035	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking. Should consider shear block on other preventative mainenance to stop movement due to skew pressure. Monitor diaphragms and neoprene bearings.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	21-May-2014		Previous Inspection Date	24-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							