

Bridge Inspection									
Bridge File Number	75051 S-2 Bridge				Form Type	PSR			
Year Built/Year Supstr	1960/1960				Lot No.	2			
Bridge or Town Name	CAYLEY				Inspector Name	Garry Roberts			
Located Over	CPR				Inspector Class	BR CLS A			
Located On	2:10 L1 31.593				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	26-Jan-2010			
Legal Land Location	NE SEC 6 TWP 17 RGE 28 W4M				Data Entry By	Kelsey Roberts			
Longitude, Latitude	-113:49:49, 50:24:21				Data Entry Date	27-Feb-2010			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Tom Carey			
Contract Main. Area	CMA27				Review Date	01-Feb-2010			
Clear Roadway/Skew	11.6 / -45 deg. (LHF)				Dept. Reviewer Name	Lorenz Bohnert			
AADT/Year	10,500 / 2008 (A)				Dept. Review Date	02-Mar-2010			
Road Classification	RFD-412.4-130				Follow-Up By				
Detour Length (km)	1								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20				----> Primary Span				

Posting Information										
Required Vert. Clearance Posting (m)										
Posted Vertical Clearance (Y/N)					No					
Posted:	Lane	NB	On Bridge (m)	In Advance (Y/N)	No	Lane	SB	On Bridge (m)	In Advance (Y/N)	No
Remarks	Not req.- over abandoned RxR									
Required Load Posting (t)			Single		Semi		Truck Train			
Posted Loading (t)			Single		Semi		Truck Train			
Posted:	Lane	NB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)			
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Remarks	Not req.									

Hazard Marker At Bridge (Y/N)	No								
Remarks									
Other Sign Types	CURVE								

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	WEST SIDE				Gas				
Power					Municipal				
Others	FIBRE OPTICS @ WEST R/W				Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			5	5	Curves both ends and @ crest of vertical curve.				
Vertical Alignment			5	5					
Roadway Width (m)			11.600						
Approach Bump			5	6					
Guardrail (Y/N)			Yes		Wrong lap at NW and NE.				
Guardrail			6	4	Not attached to bridge. Insufficient posts - none @ se				
Length (m)			76.000						
Current Standard (Y/N)			No						
Termination Type			TURNED DOWN ENDS						
Drainage			7	7					
Approach Road General Rating			5	5					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 18.6-23.2-18.6, A-Ident Number:)					
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	5	CHIP SEAL OVER TOP OF EPOXY.
(Material Type : CONCRETE - UNKNOWN POLYMER OVERLAY - CONVENTIONAL CHIP SEAL COAT)					
(Thickness (mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			5	6	
Deck Joints			3	3	Gaps estimated due to partial fill with chipcoat. Active leakage @ piers
Temperature (deg. C)		-16			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
60		N. abut			
50		N. pier			
40		S. pier			
40		S. abut			
Deck Drainage			4	5	Minor erosion under SW drain.
Drains Clogged (Y/N)		No			
Curbs/Median			3	3	BROKEN @ WEST END NORTH PIER CURB. Patches cracked, and spalled Scaling @ SW @ top Curb spalled @ east @ exterior @ center span
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail			4	4	Rail bent up @ Sp.2 west over P2. 3 A/B nuts not fully engaged. 10% CORROSION.
(Type : STEEL BRIDGE TUBE)					
Bridge Rail Posts			7	4	
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : PAINT)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			5	5	0.3 mm wide cracks in patching material of fire damaged girders at west end of north pier.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 21)					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 18.6-23.2-18.6, A-Ident Number:)					
Diaphragms/Cross Frame		5	6	15% rusted surface, superficial	
Bearings		5	5	North abut & Exterior bearing anchor bolts are tied with steel straps over piers.	
Temperature (deg. C)	2				
(Expansion Type : ROCKER BEARING)					
(Fixed Type : ROCKER BEARING)					
Coating Adequate (Y/N)	No			Corrosion @ all exterior and north bearing - 90%	
Functioning (Y/N)	Yes				
Deck Underside		5	4	long. cracks between girders med width	
Stains (Percent Area)	2			Some efflorescence @ crk @ deck underside @ center span Spalled at SE deck blackout. Active staining at Sp.2 near P1. Scaling over piers at exterior at deck	
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		5	4		
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
Bearing Seats/Caps		5	6		
(Type : CONCRETE)					
Backwalls/Breastwalls		7	7		
Wingwalls		6	6		
Piles		N	N		
Paint/Coating		X	X		
Abutment Stability		8	8		
Scour/Erosion		X	X		
Piers/Bents					
(Type : PIER-COLUMN)					
Bearing Seats/Caps		4	4	1mm wide vertical crack @ both ends of south cap and spall crack @ west end of north cap. 6 mm wide	
(Type : CONCRETE)					
(Total Number of Bearing Piles : 5:5)					
Pier Shaft/Piles		7	7		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		3	3	Failing at ends of both piers @ leakage areas.	
(Colour Description :)					
(Colour Code :)					
Pier Stability		8	7		
Scour		X	X		
Debris (Y/N)	No				
Substructure General Rating		4	4		

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	Railway is Abandoned
Traffic Safety Features		X	X	
Type				
Slope Protection		5	5	
(Type :)				
Bank Stability		8	7	
Drainage		4	5	Erosion @ deck drains @ south.
Grade Separation General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2010	@ west- straighten 1m length					
GALVANIZE/PAINT BRIDGE RAIL							
REPAIR/SEAL CURBS	2014	Approx. 15m2 curb spalls.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK	2014	HP concrete overlay (if not replaced)					
REPAIR/REPLACE DECK JOINTS	2010	repair leakage at all joints.					
RESET/ PAINT BEARINGS	2014	paint exteriors					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2014	Replace all deck joints (if bridge not replaced)					
OTHER ACTION	2010	Repair pier spall 1m2- seal pier cracks.					
OTHER ACTION	2014	PAINT PIER CAPS 20L CAPSEAL A50, seal caps					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	53.2/50.2	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Determine highway realignment plans as bridge could be eliminated. Do only necessary maint. until replaced. Rehab will be necessary if bridge is not replaced. (G.Roberts Jan.26/10)		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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	26-Oct-2011		Previous Inspection Date	14-Dec-2007			
Inspection Cycle (Default) (months)	21						
Comment							